An Archaeological Curation-Needs Assessment of Military Installations in Selected Eastern States

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St. Louis District

Mandatory Center of Expertise for the Curation and Management of Archaeological Collections

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Between May1997 and September 1999 personnel from the U.S. Army Engineer District, St. Louis conducted curation needs assessments at all active military installations in Alabama, Arkansas, Connecticut, Delaware, Florida, Georgia · Illinois, Indiana, Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, West Virginia, Wisconsin. Over 6,000 ft^3 of artifacts and over 600 linear feet of associated documentation from archaeological projects conducted on these installations were examined during the course of the fieldwork. This research was sponsored by the Department of Defense and was coordinated through the office of the Deputy Under Secretary of Defense for Environmental Security.

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By
Lara Anderson, Karolyn Kinsey, Marc Kodack, Eugene Marino, Jennifer Riordan, Barbara Smoyer, Kelly Wissehr

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Auburn University

Auburn, Alabama

Repository Summary

Volume of Artifacts: 1.92 ft^3

Collection Origin: Fort McClellan, Alabama; Maxwell Air Force Base, Alabama

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.14 linear feet

Collection Origin: Fort McClellan, Alabama; Maxwell Air Force Base, Alabama; MacDill Air Force Base, Florida

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: October 13, 1998

Point of Contact: Dr. John Cottier, Archaeologist

Auburn University serves as a repository for archaeological collections generated from projects carried out by Geo Marine, Inc., and Site, Inc., at Department of Defense (DoD) installations in Alabama and Florida. Artifact collections encompassing 1.92 ft^3 and documents collections encompassing 0.14 linear feet are located at the university's archaeology laboratory (Table 195).

Table 195.
Volume of DoD Archaeological Collections Housed at Auburn University

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Fort McClellan	0.15	0.07
MacDill Air Force Base	—	0.01
Maxwell Air Force Base	1.77	0.06
Totals	1.92	0.14

Repository

The DoD collections at Auburn University are housed in the archaeology laboratory, located in the Haley Center. Haley Center was constructed in the 1960s to serve as a university building. It contains classrooms, offices, and the university bookstore. The foundation is concrete (Figure 81), and the exterior walls are made of brick. The archaeology lab consists of two rooms connected by a doorway. One room is used to wash, process, and analyze artifacts. The other room contains display cases and wood cabinets for collections storage as well as tables for artifact and records study.

Figure 81. The foundation of the Haley Center.

Collections Storage Area

The DoD collections are stored in Room 2145, the Archaeology Research Laboratory. This room has a tile floor, a suspended acoustical ceiling, and concrete interior walls with plastic dividers. There are no windows. The only form of security for the collections is a key lock on the main laboratory door. One fire extinguisher is the only fire safety device present. No signs of pest infestation are present. There is a water stain on the ceiling. The collections area is cooled by central air conditioning and heated by central heating. The storage capacity of the archaeology lab is 100%. DoD collections are stored in an unlocked wood cabinet above a row of glass display cases (Figure 82). The cabinet measures 40 x 50.5 x 17.5 (inches, d x w x h).

Figure 82. Cabinets contain Department of Defense collections.

Artifact Storage

Approximately 1.9 ft^3 of DoD artifacts are curated at Auburn University (Table 196). The Fort McClellan collections are packed in an acidic cardboard box measuring 8 x 5.5 x 6 (inches, d x w x h). The box has an adhesive computer-printed label with the county, year, project name, and site numbers of the collections within. Inside this box are 50% paper bags and 50% plastic bags. Some of the plastic bags are stapled shut; three are zip-lock. Inside the paper bags are tertiary plastic zip-lock bags. About 20% of the artifacts—mainly the diagnostic artifacts—have been cleaned. All artifacts are sorted by site number; none are labeled.

Table 196.
Percentage by Volume of DoD Artifacts Housed at Auburn University

Material Class	Fort McClellan	Maxwell Air Force Base
Lithics	7.9	9.2
Historic Ceramics	0.1	9.2
Prehistoric Ceramics	0.0	0.0
Fauna	0.0	0.0
Shell	0.0	1.8
Botanical	0.0	0.0
Flotation	0.0	0.0
Soil	0.0	0.0
^{14}C	0.0	0.0
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.0
Worked Bone	0.0	0.0
Brick	0.0	13.8
Metal	0.0	9.2
Glass	0.0	46.0
Textile	0.0	0.0
Other (plastic)	0.0	2.8
Total	8.0	92.0

The artifacts from Maxwell AFB are kept in one folded archival box. The box has a removable lid and measures 24.5 x 12.5 x 10 (inches, d x w x h). At the time of the visit, the box still had its label from Site Inc., the company that sent the collections to Auburn University for curation. The artifacts themselves are bagged in zip-lock bags that show signs of imminent tearing. Each bag is directly labeled in marker with the project name, site number, provenience, and date. All of these artifacts are cleaned and sorted by provenience, but none of them are labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at Auburn University.

Records Storage

Auburn University currently houses approximately 0.14 linear feet (Table 197) of records from three DoD installations (Figure 83). Unless otherwise noted, all records are packed in a folded archival box. The dimensions of the box are 24.5 x 12.5 x 10 (inches, d x w x h). It has a removable lid and is directly labeled in marker with project information for both Maxwell AFB and MacDill AFB. The box is stored in the wood cabinet with the artifacts.

Table 197.
Linear Footage of DoD Associated Documentation Housed at Auburn University

Materials	Fort McClellan	MacDill AFB	Maxwell AFB
Paper	0.00	0.01	0.02
Reports	0.06	0.00	0.04
Oversized*	0.01	0.00	0.00
Audiovisual	0.00	0.00	0.00
Photographic	0.00	0.00	0.00
Computer	0.00	0.00	0.00
Total	0.07	0.01	0.06

* Includes maps and other oversized documents.

Figure 83. Examination of Department of Defense associated documentation.

Paper Records

Maxwell AFB's documents include field notes encompassing 0.02 linear feet. They are stored with the artifacts in the same box. Four analysis sheets (0.01 linear feet) from MacDill AFB are stored in the box with the Maxwell AFB collections.

Reports

Two reports, measuring 0.04 linear feet, are present in the Maxwell AFB collection. One report, measuring 0.06 linear feet, is present among the Fort McClellan records.

Maps

Approximately 0.01 linear feet of blue line maps is present in the Fort McClellan collection. Several of the maps have edges that are torn or folded over.

Collections Management Standards

Auburn University has a general curation policy. This includes a procedure guide to the storage of artifacts and documentation. Collections not obtained through Auburn University excavations are usually not accepted for curation.

Comments

1. Auburn University does not have a contract with the Department of Defense
to curate archaeological collections. The university or Dr. Cottier, before he came to Auburn University, conducted excavations, which generated the collections stored in the archaeology laboratory.

2. The collections from Maxwell AFB and MacDill AFB had arrived at Auburn University a few days prior to the assessment. Dr. Cottier had not yet had the opportunity to accession the materials.

Recommendations

1. Artifacts require (a) placement in appropriately labeled archival secondary containers, (b) insertion of acid-free labels in each secondary container, and (c) boxing Fort McClellan material in an appropriately labeled archival primary container.

2. Records require (a) packaging in appropriately labeled archival primary containers, (b) creation of a finding aid, (c) placement of maps in an archival flat file, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies to be stored in a separate, fire-safe, and secure location.

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ECG, Inc.

Anniston, Alabama

Repository Summary

Volume of Artifacts: None

Linear Feet of Records: 0.44 linear feet

Collection Origin: Clarks Hill Training Area, South Carolina

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: November 18, 1998

Point of Contact: Russell Graham, Senior Geologist

ECG, Inc., located in Anniston, Alabama, serves primarily as an environmental firm, although occasional archaeological project are conducted. ECG does not curate artifact collections. Approximately 0.44 linear feet of Department of Defense (DoD) associated documentation from a project conducted on Clarks Hill Training Area, South Carolina, are housed at ECG.

Figure 84. Exterior of building that contains ECG's offices.

Repository

ECG is located in a one-story office building with many other businesses (Figure 84). The structure was built in the mid-1970s and has always served as an office building. The building foundation is brick and concrete, with a concrete slab over grating roof. Externally, the walls are a plaster siding over brick front, and internally, they consist of plaster and sheetrock. The different offices in the building are accessed off a main hallway.

Collections Storage Area

The office space of ECG includes a large reception area, numerous individual offices, and a storage room. Currently, the DoD document collection is

kept in a metal filing cabinet in Mr. Russell Graham's office (Figure 85). This office encompasses approximately 300 ft^2 and has a carpet covered floor. There are two windows in the office,

Figure 85. Fireproof file cabinet that contains associated documentation.

both of which are covered by blinds and secured with a manual lock. Both the main ECG office door and Mr. Graham's office are accessed through wooden doors secured by key locks. Environmental controls consist of central air conditioning and heating within the entire ECG office. A fire extinguisher and manual fire alarms wired to the fire department are located in the hallway of the building. Additionally, smoke detectors are located within the building's attic. No fire protection is located within any ECG office. No signs of infestation were present, and according to Mr. Graham, the building owner probably has a pest management program, but he is unfamiliar with it. When the project is settled, the Clarks Hill Training Area documentation will be moved to the permanent filing room. This room, approximately 120 ft^2, consists primarily of records storage in and on metal filing cabinets and is accessed by a key locked wood door. Additional material, such as a photocopy machine, is also located within the room. There is one window within this room, with blinds and manual lock.

Artifact Storage

No DoD artifacts are curated at ECG.

Human Skeletal Remains

No DoD human skeletal remains are curated at ECG.

Records Storage

Approximately 0.44 linear feet of records from Clarks Hill Training Area are located at ECG (Table 198). Records from Clarks Hill Training Area are currently stored in the top drawer of a legal-sized

Table 198.
Linear Footage of DoD Associated Documentation Housed at ECG.

Materials	Linear Footage
Paper	0.17
Reports	0.17
Oversized*	0.02
Audiovisual	0.00
Photographic	0.08
Computer	0.00
Total	0.44

* Includes maps and other oversized documents.

metal filing cabinet measuring 25 x 18 x 15 (inches, d x w x h). The cabinet is fireproof. The drawer containing the documents is unlabeled and does not lock [25 x 16.5 x 11.5 (inches, d x w x h)]. The drawer is at about 80% capacity. The permanent filing cabinet has not yet been determined. However, it will be stored within a standard letter-size metal cabinet. The drawers to the cabinets in the permanent storage area are not locked, but they are labeled with project information. The records, which are originals, are stored in manila folders that are directly labeled in pen with the project information (Figure 86).

Figure 86. Extent of documentation from Clarks Hill Army National Guard Training Area.

Paper Records

The paper records comprise 0.17 linear feet and include background information, field records (notebook), maps, correspondences and site forms. The collection is in good condition, although paper clips and staples are located in the collection. These documents are originals; copies of the material were sent with the artifacts to a permanent South Carolina repository.

Photographs

Photographs, consisting of color prints, make up 0.08 linear feet within the collection. They are stored with the paper records.

Reports

Reports comprise 0.17 linear feet of the total collection.

Maps

There are approximately 0.02 linear feet of maps and they are folded.

Collections Management Standards

ECG is an archaeological contracting firm that serves only as a temporary curation repository and does not possess a comprehensive curation plan. Their primary responsibility toward materials is to analyze and hold collections until permanent housing is located.

Comments

1. Mr. Graham indicated that the artifacts from the project that generated these documents were sent to the South Carolina Institute of Archaeology and Anthropology (SCIAA). Currently, however, SCIAA cannot locate this material.

2. All records and the final report were also reportedly photocopied and sent to SCIAA, although these are also unaccounted for.

Recommendations

1. Records require (a)) removal of all contaminants (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) placement of maps in an archival flat file (e) storage of original negatives in a separate, fire-safe, and secure location.

2. Confirm existence of the duplicate copies. In the event that they are not located produce a duplicate copy of records to be stored in a separate, fire-safe, and secure location.

3. Identify a permanent repository for the transfer of the DoD archaeological collection.

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Jacksonville State University

Jacksonville, Alabama

Repository Summary

Volume of Artifacts: 5.29 ft^3
Collection Origin: Fort McClellan, Alabama
Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.38 linear feet
Collection Origin: Fort McClellan, Alabama
Compliance Status: Records require complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: November 17, 1998

Point of Contact: Dr. Harry Holstein, Director of Archaeological Research Laboratory

Jacksonville State University (JSU) temporarily houses archaeological collections from one Department of Defense (DoD) installation. Approximately 5.29 ft^3 of artifacts and 0.38 linear feet of records from Fort McClellan are stored in the archaeological research laboratory, located in Martin Hall. The artifacts will be processed for curation and then transferred to a state curation repository for permanent storage. All documents will also be transferred to another repository for permanent storage.

Repository

The DoD artifacts at JSU are stored in Martin Hall (Figure 87). This building was constructed in 1968 as a university classroom building. It has a concrete foundation, an asphalt roof covered with shingles, and brick exterior walls.

Figure 87. Front view of Martin Hall, where Fort McClellan collections are stored in the Archaeological Resource Laboratory.

Collections Storage Area

Collections from Fort McClellan are currently being processed and are stored in the archaeological research laboratory. The lab has a tile floor, a suspended acoustical tile ceiling, and sheetrock interior walls. The three to four windows are locked and covered by plastic blinds. The lab has a storage capacity of approximately 1,500 ft^2. Several different activities take place in the collections storage area, which is a full-service archaeology lab. These activities include artifact holding, washing, processing, analysis, and storage. Supplies and archaeological records are also stored in the archaeology laboratory.

Artifact Storage

The Fort McClellan artifacts (Table 199) are stored in two places in the laboratory. First, two archival quality boxes are stored on the top of a shelving unit. The shelf measures 49.5 x 30.5 x 10.3 (inches, d x w x h). The boxes measure 15.5 x 12.8 x 10.5 (inches, d x w x h). The artifacts in these boxes have been washed, sorted by site number, and placed in plastic zip-lock bags. The bags are directly labeled in marker with the site number, date, project, and investigator's name. About 15% has been directly labeled. A JSU number (e.g., JSU 604) has been marked in pen on the artifacts.

Table 199.
Percentage by Volume of DoD Artifacts Housed at Jacksonville State University

Material Class	%
Lithics	73.0
Historic Ceramics	3.4
Prehistoric Ceramics	1.8
Fauna	0.0
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.2
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	0.0
Metal	0.0
Glass	21.6
Textile	0.0
Other	0.0
Total	100.0

Figure 88. Cardboard boxes containing Fort McClellan artifacts.

Three acidic cardboard boxes of artifacts are stored on a table next to the shelves (Figure 88). The first acidic box measures 17.5 x 12 x 10 (inches, d x w x h). The sides are glued and folded together; there is no lid. The box is labeled with a paper tag written in pen and taped to the front. A JSU accession number, the site number, and the provenience are included in the label information. Within this box, 90% of the artifacts are in paper bags; the other 10% are in plastic bags. The tertiary containers consist mainly of paper bags secured with rubber bands. Plastic bags secured with rubber bands and plastic film canisters are also used to store artifacts. All of the artifacts have been washed, but only the ceramics have been directly labeled. The site number and lot number are labeled in marker on the artifact.

The second acidic box measures 17.3 x 11.5 x 9.3 (inches, d x w x h). It has a telescoping lid and is labeled directly in marker with "Ft. Mc 1996." The secondary containers are paper bags; within these bags, the artifacts are stored in both paper and plastic bags.

The third box measures 13 x 9 x 9 (inches, d x w x h). It has been damaged by compression, and the folded flaps at the top have been torn. "Ft. McC" has been labeled in marker directly on the box. The glass bottles in this box have not been placed in secondary containers of any type. All of the bottles have been washed, but they are not sorted. A few have been labeled directly in marker with the site number.

Human Skeletal Remains

There are no DoD human skeletal remains curated at Jacksonville State University.

Records Storage

The Fort McClellan records (Table 200) are stored in one drawer of a metal filing cabinet in the archaeology research lab (Figure 89). The drawer measures 28 x 15 x 11.5 (inches, d x w x h). Within the drawer, the documents are kept in ten manila folders that are labeled directly in marker and pen. The folders are sometimes dirty but are otherwise in good condition.

Table 200.
Linear footage of DoD Associated Documentation Housed at Jacksonville State University

Materials	Linear Footage
Paper	0.06
Reports	0.29
Oversized*	0.02
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.37

* Includes maps and other oversized documents.

Figure 89. Filing cabinet where Fort McClellan records are stored in the Archaeological Resource Laboratory.

Paper Records

Less than 0.06 linear feet of paper records are stored at JSU. These records consist of newspaper articles and correspondences. They are in generally good condition.

Reports

Reports encompass 0.29 linear feet of the collection.

Maps

Maps comprise 0.2 linear feet.

Collections Management Standards

JSU is not a permanent curation repository and does not have a written comprehensive curation plan.

Comments

1. The glass bottles have been washed, but they are dusty from being stored in an uncovered box.

2. All artifacts will be transferred to the University of Alabama, Moundville Archaeological Park, once they are packaged in zip-lock bags and acid-free boxes.

3. JSU will keep a copy of all records, but will send the originals to the University of Alabama-Moundville.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) bagging in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) arrangement in a logical order, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid.

3. The duplicate copies of the records should be archival and stored in a fire-safe and secure location.

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Panamerican Consultants

Tuscaloosa, Alabama

Repository Summary

Volume of Artifacts: 3.73 ft^3

Collection Origin: Fort Bragg, North Carolina; Beaufort Marine Corps Air Station, South Carolina; Parris Island Marine Corps Recruit Depot, South Carolina

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 1.64 linear feet

Collection Origin: Fort Bragg, North Carolina; Beaufort Marine Corps Air Station, South Carolina; Parris Island Marine Corps Recruit Depot, South Carolina

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: October 22, 1998

Point of Contact: Keith Little, Laboratory Director

Panamerican Consultants does not permanently curate any Department of Defense (DoD) archaeological collections. The collections assessed by St. Louis District were in the process of being boxed and returned to the installations of origin. At the time of the visit, Panamerican Consultants was temporarily storing approximately 3.73 ft^3 of artifacts and approximately 1.64 linear feet of records from Fort Bragg, Beaufort Marine Corps Air Station, and Parris Island Marine Corps Recruit Depot (Table 201).

Table 201.
Volume from DoD Archaeological Collections Housed at Panamerican Consultants

Installation	Archaeological Materials (ft^3)	Records (linear feet)
MCAS Beaufort	0.25	0.94
Fort Bragg	0.17	0.23
Parris Island Marine Corps Recruit Depot	3.31	0.47
Totals	3.73	1.64

Repository

The Tuscaloosa offices of Panamerican Consultants are in a 20–30 year old building originally used as a post office. It has a concrete foundation, brick exterior walls, and a roof covered with shingles. Collections are kept in or adjacent to a main work space that is used to process incoming artifacts and documents, as well as to prepare them for transport to a permanent curation repository.

Collections Storage Areas

Collections are stored in two locations at PCI, a laboratory area and an office. The laboratory area is also used as an artifact holding area, a processing lab, a study room, and offices. The laboratory area has a tile floor, concrete block interior walls, a plaster ceiling, and two windows. The windows are not covered or locked, but they are kept closed. The main collections area measures 818 ft^2. The climate inside the PCI building is controlled by central air conditioning and forced-air heat. Security devices include an intrusion alarm on the door, a key lock on the building's front door, and a motion detector in the main artifact work space. Fire protection measures consist of one fire extinguisher, which was last inspected in 1996 and a smoke detector. The building is sprayed for pests once a month. Signs of pest infestation were not present during the assessment.

Some of the collections are temporarily stored in an office. The office has a storage capacity of 134 ft^2, and about 75% of this space is utilized for temporary storage.

Artifact Storage

Artifacts from Fort Bragg (Table 202) are kept in a folded acidic cardboard box that was stored on a nonmovable metal shelving unit (Figure 90 and 91). The box measures 9.75 x 12.25 x 2.5 (inches, d x w x h), and has folding flaps secured with tape. It is overpacked and is slightly torn. The box is labeled directly in marker with the installation name. Artifacts are bagged in plastic zip-lock bags labeled directly in marker with the site number and installation name. The material has been washed, sorted by provenience, and labeled directly with marker. Artifacts from Beaufort Marine Air Station are in one glued acidic cardboard box (Figure 92) measuring 11 x 7.25 x 5.5 (inches, d x w x h). It has folded flaps and the bottom is taped shut. The label is an adhesive note taped to the box. The site number, another identifying number, and "artifacts" are written on it in marker. The box was on the floor at the time of the visit. The artifacts are bagged in plastic zip-lock bags. Inside the bags are computer-generated paper tags bearing the site number, date, provenience, investigator's initials, and artifact description. All material is washed, sorted by provenience, and labeled directly in pen.

Table 202.
Percentage by Volume of DoD Artifacts Housed at Panamerican Consultants

Material Class	MCAS Beaufort	Fort Bragg	Marine Corps Recruit Depot Parris Island
Lithics	0.0	1.2	1.2
Historic Ceramics	0.3	0.0	5.9
Prehistoric Ceramics	2.7	0.0	19.2
Fauna	0.0	0.4	8.6
Shell	0.0	0.0	10.3
Botanical	0.0	0.0	0.9
Flotation	0.0	0.0	0.0
Soil	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0
Brick	0.3	1.4	1.2
Metal	1.0	1.2	2.1
Glass	2.4	0.5	39.4
Textile	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total	6.7	4.7	88.6

Figure 90. Example of shelving units.

The collections from Parris Island Marine Corps Recruit Depot are packed in three folded archival boxes measuring 15.5 x 12.25 x 10 (inches, d x w x h). One box is overpacked, and one flap of the lid of another box is ripped. Within the boxes, the artifacts are stored in plastic bags, of which 75% are plastic zip-locks and 25% are plastic bags secured with tape. One bag was open at the top. All artifacts are cleaned and sorted by provenience. Only one artifact has a direct label, which is in. The other artifacts have computer-generated paper tag inserted into their plastic bags. The site number, provenience, date, investigator's initials, and material description are given on the tag.

Figure 91. Boxes stacked two-high that contain Department of Defense artifacts.

Figure 92. Artifacts from Marine Air Station, Beaufort.

Human Skeletal Remains

There are no DoD human skeletal remains curated at Panamerican Consultants.

Records Storage

In total, 1.64 linear feet of DoD records are stored at PCI (Table 203). The 0.23 feet of records from Fort Bragg are kept in six manila folders in a metal filing cabinet. The records occupy one drawer measuring 25 x 13.25 x 11.5 (inches, d x w x h). One folder has an adhesive label, one has a pen-written direct label. Both labels have "Fort Bragg" and the number 97498. The other four folders are not labeled.

The records in Beaufort Marine Corps Air Station and Parris Island Marine Corps Recruit Depot are kept on a desk or on the floor in one of the offices. The records from Beaufort Marine Corps Air Station include both paper and photographic records.

Table 203.
Linear Footage of DoD Associated Documentation Housed at Panamerican Consultants

Materials	MCAS Beaufort	Fort Bragg	Marine Corps Recruit Depot Parris Island
Paper	0.35	0.21	0.42
Reports	0.58	0.00	0.00
Oversized*	0.00	0.02	0.04
Audiovisual	0.00	0.00	0.00
Photographic	0.01	0.00	0.01
Computer	0.00	0.00	0.00
Total	0.94	0.23	0.47

* Includes maps and other oversized documents.

Loose papers and a report are kept on the floor. Photographs are kept in one archival plastic sleeve stored together with the installation's other records. The sleeve is labeled directly in marker with the site name and number. The Parris Island Marine Corps Recruit Depot collection contains paper records kept in several manila folders that are labeled directly in pen or pencil and one folder with an adhesive label. Some folders are dirty but are otherwise in good condition. Photographic records are kept in archival plastic sleeves labeled directly in marker with "Parris Island" and the roll number. Maps are folded to fit in a mailing envelope with a metal clasp. The envelope is not labeled.

Paper Records

Fort Bragg's document collections are comprised of 0.21 linear feet of analysis paperwork, site forms, and excavation forms. The Beaufort Marine Air Station document collection includes about 0.35 linear feet of administrative records, analysis forms, bag lists, and excavation forms. Associated documentation from Parris Island Marine Corps Recruit Depot consists of administrative records, background information, excavation and analysis forms, photo logs, and bag lists, totaling 0.42 linear feet.

Reports

Reports encompassing 0.58 linear feet are present among the records.

Photographs

Negatives encompass 0.01 linear feet of the collection. All material is in excellent archival condition.

Maps

Maps encompass 0.06 linear feet of the collection.

Collection Management Standards

PCI does not keep or accept any archaeological material for long-term curation. Any materials in the building are there temporarily until they can be processed and sent to the appropriate curation repository.

Comments

1. PCI is planning on making a copy of all the records to keep in-house before sending the originals to the military installations of origination.

2. Collections are stored on the floor.

3. Maps are rolled.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) placement of maps in an archival, flat file case until transfer, and (c) creation of a finding aid.

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Troy State University

Troy, Alabama

Repository Summary

Volume of Artifacts: 2 ft^3
Collection Origin: Fort Rucker, Alabama
Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: None

Human Skeletal Remains: None

Assessment

Date of Visit: October 15, 1998

Point of Contact: Mack Broom, Archaeologist

Troy State University does not curate materials from other institutions. It stores only the collections generated from projects conducted by the university. Troy State's Department of Defense (DoD) collections totaling 2 ft^3 from Fort Rucker.

Figure 93. Entrance to Archaeological Research Center, Eldridge Hall.

Repository

Archaeological collections are stored in Eldridge Hall (Figure 93). Originally a residence hall, the one-story building was constructed in approximately 1925. Eldridge Hall has a concrete foundation, concrete block and brick exterior walls, and a steel roof. The building now serves as classrooms, offices, and laboratory space. It encompasses 1,200 ft^2.

Collections Storage Area

The collections storage room is located in Eldridge Hall (Figure 94). It has a concrete floor and a metal ceiling. The interior walls are concrete block (Figure 95). The one window in the collections room is not covered or locked. It is 25 to 30 feet high, however, and the university is considering spray painting it black. No activities other than the storage of artifacts currently take place in the collections storage room. The temperature inside the storage room is controlled by central air-conditioning and forced-air heat. Security features include a dead-bolt lock and key lock on the storage room door. In addition, campus security patrols Eldridge Hall daily

Figure 94. The collections storage area.

Figure 95. Interior walls of the collections storage area.

during business hours. Minimal fire protection features are in place in the collections storage room. One fire extinguisher, which is checked "regularly," is the only means of fire suppression present. The storage area is sprayed for pests once every month to two months. Storage capacity is currently at 65%.

Artifact Storage

Artifacts from Fort Rucker are stored in one acid-free folded box on a immovable wood-shelving unit. The box is labeled directly in marker; it has a telescoping lid and measures 18 x 12 x 16 (inches, d x w x h). Within the box, artifacts are in one paper bag secured with a rubber band. The installation's name and the site number have been labeled directly on the bag in pen. The artifacts have not been cleaned or labeled (Table 204).

Table 204.
Percentage by Volume of DoD Artifacts Housed at Troy State University

Material Class	%
Lithics	80
Historic Ceramics	20
Prehistoric Ceramics	0
Fauna	0
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	0
Glass	0
Textile	0
Other	0
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at Troy State University.

Records Storage

No DoD associated documentation is housed at Troy State University.

Collections Management Standards

Troy State University does not currently have a curation program or a collections management plan. The emphasis is on fieldwork, particularly field school, rather than on storage or preservation of artifacts. The archaeology department only stores the artifacts acquired from in-house field work projects.

Comments

The collections storage room at Troy State University is accessible only via a classroom which was in use at the time of the visit. Consequently, it was not possible for St. Louis District personnel to view the storage room itself. Mr. Broom provided information about the collections storage area.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) packaging in appropriately labeled archival secondary containers, and (d) insertion of acid-free labels into secondary containers.

2. Create a comprehensive curation policy.

3. Identify a permanent repository for the transfer of the DoD archaeological collections.

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University of Alabama, Moundville

Office of Archaeological Services
Moundville, Alabama

Repository Summary

Volume of Artifacts: 181.85 ft^3

Collection Origin: Fort Rucker, Alabama; Maxwell Air Force Base, Alabama; Redstone Arsenal, Alabama; Hurlburt Field, Florida; Key West Naval Air Station, Florida; Mayport Naval Air Station, Florida; Beaufort Marine Corps Air Station and Naval Hospital, South Carolina; Milan Army Ammunition Plant, Tennessee

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 3.47 linear feet

Collection Origin: Fort Rucker, Alabama; Maxwell Air Force Base, Alabama; Redstone Arsenal, Alabama; Hurlburt Field, Florida; Key West Naval Air Station, Florida; Mayport Naval Air Station, Florida; Beaufort Marine Corps Air Station and Naval Hospital, South Carolina; Milan Army Ammunition Plant, Tennessee

Compliance Status: Documentation requires partial rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: 3.3 ft^3

Collection Origin: Redstone Arsenal, Alabama

Compliance Status: NAGPRA Section 5 and Section 6.

Assessment

Date of Visit: October 19-21, 1998

Point of Contact: Dr. Eugene Futato, Senior Archaeologist and Curator of Archaeological Collections

The Office of Archaeological Services (OAS) is located on property adjacent to Moundville Archaeological Park. Collections at Moundville are stored within two repositories, the Erskine Ramsay Archaeological Repository, and the David L DeJarnette Archaeological Laboratory. The first repository, the Erskine Ramsay Archaeological Repository, stores all Department of Defense (DoD) artifactual material, all paper records, and all photographic negatives. DoD photographic contact sheets are located in the second building, the David L. DeJarnette Laboratory of Archaeology. In addition to these two repositories, skeletal material at OAS is stored in the Laboratory of Human Osteology on the University of Alabama, Tuscaloosa Campus.

The St. Louis District previously visited the three repositories (St. Louis District 1995, 1996) and most recently in 1998. Information regarding repository structure is taken from these previous visits, however, all DoD collection data is new (Table 205). Due to time constraints, two of the largest artifact collections (Beartail Cave Project from Redstone Arsenal and Beaufort Marine Corps Air Station and Naval Hospital) were only sampled.

Table 205.
Volume of DoD Archaeological Collections Housed at the University of Alabama, Moundville

Installation	Archaeological Materials (ft^3)	Human Remains (ft^3)	Records (linear feet)
Marine Corps Air Station, Beaufort and Beaufort Naval Hospital	31.0	0.00	0.42
Fort Rucker	8.54	0.00	0.78
Hurlburt Field	0.91	0.00	0.08
Maxwell Air Force Base	0.91	0.00	0.03
Milan Army Ammunition Plant	0.91	0.00	0.02
Key West Naval Air Station	0.91	0.00	0.05
Mayport Naval Air Station	0.91	0.00	0.05
Redstone Arsenal	137.76	3.30	2.04
Totals	181.85	3.30	3.47

Notes:
1. Sampling was conducted for the Beartail Cave collection from Redstone Arsenal. In total, there were 224 boxes in this collection. Soil samples comprised 72 of these boxes. Of the remaining 152 boxes, 63 (41%) were examined. The total in the table reflects the 72 boxes of soil samples and the 63 other artifact boxes (135 boxes). The remaining 89 boxes, although not individually examined, total 86.33 ft^3. Therefore, a total of 137.8 ft^3 of artifacts from Redstone Arsenal are currently housed at the University of Alabama-Moundville.
2. Collections from Beaufort Marine Corps Air Station and Naval Hospital are lumped together becasue there was not sufficient information to determine exactly what materials came from which facility.

Repositories

The Erskine Ramsay Repository was constructed in 1947 and extensively renovated in 1985. The building was originally designed as a repository. The repository is approximately 11,000 ft^2 in total area, with a large (8,700 ft^2) three-level repository area and a two-level area with separate rooms for document and special storage collection. The exterior construction is of concrete masonry units, and the interior structure is a system of steel plates. A wood plank flooring system is suspended from this steel framework. The asphalt single roof was replaced in 1985 and all existing windows were enclosed with brick.

The DeJarnette Laboratory is a 12,000 ft^2 pre-fabricated structure constructed in 1980. The steel frame structure rests on a concrete slab on grade foundation. The floor area is divided into three sections. The north portion of the building is used for loading and processing. The center portion is dedicated to photograph processing, staff offices with restroom, the OAS library, and a GIS/CAD office. The south portion is used for temporary artifact storage and a general storage area. Additionally, some photographic material is stored here.

The laboratory of Human Osteology is located on the third floor of a new six-story natural science building at the University of Alabama, Tuscaloosa (Figure 96). The OAS and laboratory staff contributed to the finished design of the building and the osteological space. Within this building the offices and laboratories are arranged around a U-shaped corridor with the storage areas concentrated in the core that occupies the area between the legs of the U-shape. The exterior of the building is a brick veneer with a concrete framed structure. The building is served by the campus hot and chilled water system. All human remains are stored in this repository.

Figure 96. The Special Collections building in Tuscaloosa where the Laboratory for Human Osteology is located.

Collections Storage Areas

The Ramsay Archaeological Repository is divided into two climate-controlled zones. Two heat pump

units provide heating and cooling to the repository area, and a single heat pump unit serves the documents and special collections storage areas. The temperature and humidity are monitored and kept constant at 65° F ± 5° and at 65% relative humidity. The collections area has an automatic wet-pipe fire suppression system, an automatic detection system, and heat and smoke sensors. These systems are wired to the University security office. In addition to the detection and suppression system, fire-rated doors and frames were added to every interior door of the repository. The repository is secure with dead-bolt locks, motion detectors and intrusion alarms. An additional set of locks provides extra security for the special collections area. These are wired to the University security office. No integrated pest management program exists at this repository, but no evidence of pest infestation as noticed during the assessment.

Each of the three portions of the DeJarnette Laboratory is zoned climate-controlled and served by a natural gas furnace and electric air-conditioner. Automatic fire detection system in the area consists of smoke sensors wired to the University security office. There is no automatic fire suppression system, but there are fire extinguishers located throughout the repository. The laboratory is secured with dead-bolt locks, motion detectors, and intrusion alarms. These systems are wired to the University security office. DoD photographic contact sheets are stored in the laboratory area on nonmovable wood shelves.

The collections storage room in the Laboratory of Human Osteology measures 1,656 ft^2. The collection core area has its own separate heating, ventilation, and air conditioning (HVAC) zones with humidity control. The laboratory is also equipped with a wet-pipe fire suppression system. Manual pull alarms, automatic smoke sensors and heat detectors are combined as the building's fire detection system. The repository core area is separate from the office/laboratory areas by fire-rated construction. The University of Alabama police department provides security for the building and laboratory/office areas within it. The collection storage area is secure by a key-pad Omni lock system (Figure 97). Access is highly restricted. Human remains are the only materials stored within this room. Dr. Jacobi controls pest management and contacts the university system a few times a year for

Figure 97. Omni lock system for the storage room at the Laboratory of Human Osteology.

management. Dr. Jacobi is present during this access to the human remains collections. The entire collection of human remains has been re-analyzed, catalogued, and entered into a relational computer database that facilitates research. Human remains are stored within specifically designed metal cabinets

Figure 98. Collection storage cabinets (located behind boxes) in the Laboratory of Human Osteology.

with unpadded wooden shelves (Figure 98). These line the walls and form aisles.

Artifact Storage

All DoD artifacts, not including human remains, are stored at the Erskine Ramsay repository (Table 206). They are stored on nonmovable wood shelves. DoD collections are contained in archival boxes with removable lids (Figure 99). A plastic strap binding with a metal clasp, which must be cut, secures these boxes. All boxes are directly labeled in marker with project and accession numbers. The boxes are

Table 206.
Percentage by Volume of DoD Artifacts Housed at the University of Alabama, Moundville

Material Class	MCAS Beaufort and Beaufort Naval Hospital	Fort Rucker	Hurlburt Field	Maxwell AFB	Milan Army Ammunition Plant	NAS Key West	NAS Mayport	Redstone Arsenal
Lithics	0.9	2.3	0.0	0.3	0.1	0.0	0.0	24.7
Historic Ceramics	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.5
Prehistoric Ceramics	2.8	1.5	0.5	0.1	0.0	0.0	0.5	4.7
Fauna	2.2	0.0	0.0	0.0	0.0	0.0	0.0	5.9
Shell	2.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
Botanical	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.5
Flotation	3.7	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Soil	2.8	0.1	0.0	0.0	0.0	0.0	0.0	3.9
14C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Human Skeletal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5
Worked Shell	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Brick	0.2	0.0	0.0	0.0	0.1	0.0	0.0	6.2
Metal	0.2	0.1	0.0	0.0	0.2	0.1	0.0	0.8
Glass	0.3	0.2	0.0	0.0	0.1	0.4	0.0	0.8
Textile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other (beads and plastic)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	16.7	4.6	0.5	0.5	0.5	0.5	0.5	76.2

Figure 99. Examples of collection storage boxes at the Ramsay Archaeological Repository.

stacked four high on the shelves. Secondary and tertiary containers consist mostly of paper bags secured with rubber bands or unsecured. Some of the secondary and tertiary containers are plastic zip-lock bags, and all soil samples are contained within plastic zip-lock bags. Although labeling on the secondary containers varies, it always includes the site number, provenience, and accession number. All of the artifacts have been cleaned and sorted by provenience. Less than 15% however, are directly labeled.

Human Skeletal Remains

Human remains from Redstone Arsenal are stored in the Osteology Laboratory. The St. Louis District in 1996 inventoried this material for NAGPRA (St. Louis District 1996). Since that time, the Special Collections Building was constructed and all collections moved. The DoD assessment team did not re-inventory the human remains, but rather assessed their current storage and curation

Figure 100. Interior of cabinets that store the Redstone Arsenal human remains.

Table 207.
Linear Footage of DoD Associated Documentation Housed at the University of Alabama, Moundville

Material Class	MCAS Beaufort and Beaufort Naval Hospital	Fort Rucker	Hurlburt Field	Maxwell AFB	Milan Army Ammunition Plant	NAS Key West	NAS Mayport	Redstone Arsenal
Paper	0.21	0.53	0.06	0.02	0.01	0.02	0.02	1.58
Reports	0.13	0.17	0.00	0.00	0.00	0.00	0.00	0.24
Oversized*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.12
Audiovisual	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Photographic	0.06	0.08	0.02	0.01	0.00	0.02	0.00	0.10
Computer	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Total	0.42	0.78	0.08	0.03	0.01	0.04	0.04	2.04

* Includes maps and other oversized documents.

conditions. The human remains are located in one cabinet, as described above (Figure 100). Each metal cabinet is labeled with an insert as to its contents (site numbers). Additionally, each drawer is also labeled. The human remains are stored by skeletal element in paper bags, which are not secured. These are labeled with site number and skeletal element.

Records Storage

Records consist of approximately 3.47 linear feet (Table 207) and are stored in three areas at OAS. The photographic contact sheets are stored with the DeJarnette Laboratory. These are used as finding aids for the slides and negatives within the Ramsey repository. The contact sheets are stored on nonmovable wood shelves within three-ring binders. These are arranged by year and accession number. Accessioned paper records are stored in the Ramsay repository in an environmentally controlled room constructed specifically for this purpose and stored on nonmovable metal storage shelves. Another specially designed room in the Ramsay repository holds the photographic records and maps. This room is also environmentally controlled. No records are located at the Laboratory of Osteology.

Paper Records

The paper records comprise the majority of the collections and include background and administrative documents, excavation, survey, and analysis records, and draft reports. They are curated in acid-free boxes with removable lids (Figure 101). Documentation is arranged by project and/or site and the majority are stored within archival folders. Each box is labeled directly with black marker. Label information consists of box number, project name,

Figure 101. Archival boxes with records in the records storage room at the Ramsay Archaeological Repository.

site number, accession number, and folder number. On each folder, also in black marker, a label contains the accession number, folder number and content information.

Photographs

Accessioned Photographic records consist of contact sheets, negatives, and slides. As described above, the contact sheets are located within the DeJarnette repository. In the Ramsay repository, all slides and negatives are stored in four-drawer metal file cabinets in archival quality, hanging polyethylene plastic sleeves. File cabinets are directly labeled in black marker with drawer number and type of

photographic record. Hanging sleeves are organized by project (accession number), and typed labels separate each project. Plastic sleeves are labeled in permanent marking ink with the accession number and the slide or negative numbers. Individual slides are labeled in ink with the roll and slide number as well as the accession number.

Maps

Large maps are curated in the same environmentally controlled room as the photographic records. They are stored in five-drawer map flat units that are separated within the drawers by acid-free paper labeled with accession number. Outside drawer labels are typed with the drawer number and accession number.

Collections Management Standards

The Office of Archaeological Services is a long-term curation repository with a comprehensive curation plan (OAS 1998).

Comments

1. All three repositories meet federal security and environmental control requirements.

2. Boxes are overstacked on the shelving units and many were overpacked and extremely heavy.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) creation of an archival duplicate copy of paper records, and (b) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Apply adhesive polyethylene plastic label holders with acid-free paper inserts to the archival primary containers.

4. Placement of human remains at the Laboratory of Osteology in appropriately labeled archival secondary containers.

5. Add more shelves to the Erskine Ramsay units or move boxes to reduce the chance of compression damage from the overpacking and overstacking.

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Arkansas State University

Arkansas Archeological Survey
Jonesboro, Arkansas

Repository Summary

Volume of Artifacts: 13.31 ft^3

Collection Origin: Eaker Air Force Base, Arkansas

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 1.5 linear feet

Collection Origin: Eaker Air Force Base, Arkansas

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: August 26-27, 1998

Point of Contact: Dr. Julie Morrow, Station Archaeologist

Arkansas State University (ASU) maintains an archaeological field station for the Arkansas Archeological Survey (AAS). Approximately 13.31 ft^3 and 1.5 linear feet of Department of Defense (DoD) archaeological collections and associated documentation from three projects conducted on Eaker Air Force Base are housed at this field station.

Repository

There are two collection repositories maintained by Arkansas State University. Repository 1, which holds all archaeological collections, is part of a building used by the Agriculture Department and was previously used to house fowl. Repository 2, which holds all associated records, is located in the basement of the University Museum/Library building.

Collections Storage Area

The collections from Eaker Air Force Base are permanently housed in a large, metal pole barn structure located across from the main student campus (Figure 102). It is approximately 1,690ft^2. Half of the building serves as the Agriculture Department's poultry barn, and the other half is used to hold archaeological collections. This repository has no environmental controls. The only source of ventilation is the garage door at one end of the building and a side door. A floor fan is used to circulate air inside the building. Lighting in the repository is nonfiltered fluorescent. The repository receives no custodial services, except that provided by the curation staff. The area nearest to the archaeological collections is fairly clean; however other portions of the collections area are maintained less meticulously. Additionally, as a result of its prior

Figure 102. Chicken coop that serves as the curation repository.

use as a poultry barn, the collections area has two linear 2 x 4 (inches, d x w) troughs in the floor that runs the length of the building on each side. These troughs are used to evacuate chicken excrement from the interior of the building to the surrounding grounds around the exterior of the building. Since one side of this structure is still utilized as a poultry barn, these troughs are still in use. This poses incredible risk to the collections as well as an unsanitary work environment within the collections storage area. Pest management, security, and fire detection and suppression are additional concerns that are not adequately provided for by this repository.

The ASU Library and Museum building is owned by the university and is used for offices, library, museum, classrooms, laboratories, and collection storage areas. Exterior walls of this repository are concrete block with a brick façade, and the roof is built-up asphalt. Interior walls are concrete block with concrete floors throughout, and the ceiling is composed of suspended acoustic tile. No leaks or structural problems in the roof or foundation have been noted. Room 168, which shares identical structural components with the rest of the building, is used as storage space for records from archaeological investigations.

Artifact Storage

Artifacts from Eaker Air Force Base are stored on nonmovable metal shelving units in plastic Rubbermaid tubs that measure 21.5 x 15 x 9 (inches, d x w x h) (Figure 103). Containers are labeled directly in marker with site numbers, project name,

Figure 103. Storage units inside the curation repository.

box number, and catalog numbers. Within the tubs, collections are stored in plastic zip-lock bags. Artifacts encompass approximately 13.31 ft^3, are sorted by site number and material class, and have been cleaned and directly labeled (Table 208).

Table 208.
Percentage by Volume of DoD Artifacts Housed at Arkansas State University

Material Class	%
Lithics	10.8
Historic Ceramics	22.1
Prehistoric Ceramics	31.5
Fauna	9.2
Shell	0.0
Botanical	6.3
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	0.0
Metal	6.7
Glass	13.3
Textile	0.0
Other (historic beads)	0.1
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated at Arkansas State University.

Records Storage

All records from Eaker Air Force Base (1.5 linear feet) (Table 209) are stored in Room 168 on nonmovable metal shelving units that measure 24 x 48 x 85 (inches, d x w x h) (Figure 104). The primary container for these records is one archival cardboard box that measures 15.25 x 12 x 10.25 (inches, d x w x h). The box is directly labeled with marker and in good condition.

Table 209.
Linear footage of DoD Associated Documentation Housed at Arkansas State University

Materials	Eaker AFB
Paper	0.04
Reports	1.17
Oversized*	0.04
Audiovisual	0.00
Photographic	0.25
Computer	0.00
Total	1.50

* Includes maps and other oversized documents.

Figure 104. Storage units located in the basement records storage room in the university's museum/ library building.

Paper Records

Paper records comprise approximately 0.04 linear feet. Overall the condition was quite good.

Reports

Reports comprise approximately 1.17 linear feet.

Photographs

Photographs encompass 0.25 linear feet of black-and-white negatives and are stored with the paper records.

Maps

Maps comprise approximately 0.04 linear feet. They are folded and in the same box as the paper records.

Collection Management Standards

The Arkansas State University at Jonesboro is a long-term curation repository. They use the same collections management standards listed in the *AAS Information and Curation Standards For Those Considering The Arkansas Archaeological Survey As A Depository for Long Term Curation of Archaeological Materials* (1993) that provides for consistent and efficient care of the collections.

Comments

1. There is no integrated pest management system in Repository 1.

2. Fire detection systems are only present in Repository 2.

3. Primary containers for artifact collections consist of plastic tubs with removable lids.

4. Primary containers for records are generally adequate, but the secondary containers consist of acidic containers that are not suitable for long-term storage.

Recommendations

1. Artifacts require (a) appropriately labeled archival primary and secondary containers, and (b) insertion of acid-free labels in each secondary container.

2. Records require (a) creation of a finding aid, (b) packaging in appropriately labeled archival secondary containers, (c) placement of maps in an archival flat file, (d) creation of an archival duplicate

copy of paper records, and (e) storage of archival duplicate paper copies and original negatives to be stored in a separate, fire-safe, and secure location.

3 Remove collections from Repository 1.

132

Arkansas Archeological Survey

Fayetteville, Arkansas

Repository Summary

Volume of Artifacts: 12.55 ft^3

Collection Origin: Fort Chaffee, Arkansas; Little Rock Air Force Base, Arkansas

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 1.5 linear feet

Collection Origin: Fort Chaffee, Arkansas; Little Rock Air Force Base, Arkansas

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: April 7, 1999

Point of Contact: Lela Donat, Registrar

The Arkansas Archeological Survey is located in Fayetteville, Arkansas, and serves as the main archaeological repository for collections generated by archaeological projects. The repository has archaeological collections from Fort Chaffee and Little Rock Air Force Base consisting of approximately 12.55 ft^3 of archaeological materials and 1.5 linear feet of associated documentation (Table 210).

Table 210.
Volume of DoD Archaeological Collections Housed at the Arkansas Archeological Survey

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Fort Chaffee	7.11	0.29
Little Rock Air Force Base	5.44	1.21
Totals	12.55	1.50

Repository

The Arkansas Archeological Survey building was completed in 1998, with personnel, equipment, and archaeological collections moving in in April 1999. The single-story building is constructed of noncombustible materials, including a concrete floor, metal stud, brick veneer, gypsum wallboard, and open-web metal joist (Figure 105). The building is designed to be a mixed-use business and low hazard storage repository.

Two gas-fired water boilers provide heat, whereas two electric units are used to cool the building. The building is zoned and controlled according to the special needs of each area. A hydrometer is used in the collections storage. The air-handling unit automatically responds to changes in humidity beyond a range of 45–55%. Air filters consist of three layers-pre, main, and carbon. The carbon layer absorbs excess humidity in incoming air. Fire protection measures include a wet-pipe

Figure 105. Exterior view of thenew Arkansas Archaeological Survey repository building at the University of Arkansas, Fayetteville.

Figure 106. Interior view of the large open bay, collection storage area.

sprinkler system and chemical fire extinguishers. Smoke sensors are installed throughout the building. Heat sensors are at the sprinkler heads that are activated when temperatures reach 130^0 F. A two-hour fire rated central hallway divides the collections storage from the rest of the building. Egress routes are clear and direct. Illuminated exit signs have been placed at each exit. Both automatic and manual pull alarms are installed. The system is wired to and monitored by the University of Arkansas Police Department. Emergency strobe lights are also installed. Dead-bolt locks at the entrance doors provide security. By the end of 1999, the building will be equipped with an intrusion alarm system after installation of the fiber-optic cable is completed. The university police will monitor the system as well as patrol the site.

Collections Storage Area (Room 113)

The collection storage area is a large open bay with approximately 13,000 ft^2 (Figure 106, Table 211). The AAS collections occupy approximately 25% of the room. The University of Arkansas Museum will move their archaeological and nonarchaeological collections into the rest of the room sometime in 1999. However, the AAS and the museum collections will be administered separately. With the AAS and the museum collections, the room will be at 100% capacity. Access to collections storage requires a code to enter. The collections storage exterior doors can only be opened from the inside. Motion detectors are present by the doorways.

Table 211.
Percentage by Volume of DoD Artifacts Housed at the Arkansas Archeological Survey

Material Class	Fort Chaffee	Little Rock AFB
Lithics	17.9	9.3
Historic Ceramics	12.3	10.8
Prehistoric Ceramics	0.0	0.0
Fauna	0.0	0.0
Shell	2.9	0.0
Botanical	0.0	0.0
Flotation	0.0	0.0
Soil	0.0	0.0
^{14}C	1.9	0.0
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.0
Worked Bone	0.0	0.0
Brick	3.8	5.5
Metal	11.8	10.8
Glass	6.1	6.9
Textile	0.0	0.0
Other	0.0	0.0
Total	56.7	43.3

Temperature and relative humidity (RH) are controlled at a targeted 68°F ± 2° F and 50% RH, respectively. Two hygrothermographs are in place, with the charts filed weekly. Incandescent bulbs are not filtered. There are no windows. Sticky traps monitor insects and rodents. Food is not allowed in the room.

Artifact Storage

Movable metal shelves hold acidic or archival boxes of various sizes, or Rubbermaid tubs 10.5 x 14 x 8 (inches, d x w x h) with artifacts (Figure 107). The boxes, when labeled, are directly labeled in marker

Figure 107. Movable metal shelves holding archaeological collections in various sized boxes.

with the site number. The tubs have direct labels written in marker with the property, site number, accession number, catalog numbers, and tub contents. The labeling is consistent. Artifacts in the boxes and tubs are contained in zip-lock plastic bags (2- or 4-mil). Secondary container labels are directly written in marker with the site number, accession number, and catalog numbers. Inside the bags are acidic paper, preprinted tags with the site number, date, provenience, or recorder. The information is written in pen and marker. Nesting of plastic bags inside of the secondary containers occurs. Some of the nested bags also have the preprinted tags. When artifacts are labeled, the labels are direct and written in pen with the accession number.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Arkansas Archeological Survey.

Records Storage

Records from Fort Chaffee and Little Rock Air Force Base (Table 212) are stored in unlabeled, acidic boxes of various size. Secondary containers, when present, consist of manila folders labeled directly in pen, unlabeled vinyl binders, and for photographs, labeled and unlabeled Polyvinyl Chloride (PVC) sleeves. A duplicate copy of the administrative records and some photographic records does exist.

Paper Records

Paper records comprise approximately 0.92 linear feet.

Table 212.
Linear Footage of DoD Associated Documentation Housed at the Arkansas Archeological Survey

Materials	Fort Chaffee	Little Rock AFB
Paper	0.25	0.67
Reports	0.00	0.00
Oversized*	0.00	0.00
Audiovisual	0.00	0.00
Photographic	0.04	0.54
Computer	0.00	0.00
Total	0.29	1.21

* Includes maps and other oversized documents.

Photographs

Photographs measure 0.58 linear feet and include black-and-white negatives, black-and-white contact sheets, and color slides.

Collections Management Standards

The Arkansas Archeological Survey is a permanent curation repository and has many collection management policies including accession, minimum standards of acceptance, field curation, loans, access to collections, artifact labeling, bag labeling, emergencies, and security (AAS 1993, 1999). Draft plans are being reviewed for pest management and deaccession.

Comments

The Arkansas Archeological Survey new collections storage area is already at 100% capacity.

Recommendations

1. When necessary artifacts require (a) placing in appropriately labeled archival primary and secondary containers, and (b) insertion of acid-free labels in secondary containers.

2. Records require (a) arrangement in a logical order, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival duplicate copy of paper records and original negatives in a separate, fire-safe, and secure location.

133

University of Arkansas, Fayetteville

University of Arkansas Museum
Fayetteville, Arkansas

Repository Summary

Volume of Artifacts: 54.45 ft^3
Collection Origin: Fort Chaffee, Arkansas
Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 3.19 linear feet
Collection Origin: Fort Chaffee, Arkansas
Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: March 22-23, 1999

Point of Contact: Mary Suter, Registrar

DoD collections are housed at the University Museum's collections repository located in Vol Walker Hall on the University of Arkansas, Fayetteville, campus (Figure 108). Collections, all from Fort Chaffee, total 54.45 ft^3 of artifacts and 3.19 linear feet of associated documentation.

Figure 108. The front of Vol Walker Hall.

Repository

Vol Walker Hall was constructed in 1934 as a library. It currently serves as storage space for the University Museum and as a classroom facility. The building has a shingled roof and a concrete and masonry foundation. The frame is concrete with a limestone veneer, and the external walls are stone. The building has zoned air and heat to regulate the temperature inside the rooms. The front door of Vol Walker Hall is secured by locking the crash bars.

Collection Storage Areas

Artifacts and records are stored in two separate areas, the former stacks area and Room 33, respectively. Artifact collections stored on the first

floor former stacks area are accessible through a door across the hall from the registrar's office. DoD collections are stored in the "cage," a section divided from the rest of the space by a "wall" of metal wiring and a temporary wood door and frame. Artifacts from contract archaeology projects and historic textiles are stored in this area. Boxes are stacked three-high on metal shelves. The storage capacity is at 100% (Figure 109). The floor is concrete with adhesive tile, the interior walls are plastered over ceramic bricks, the ceiling is concrete, and there are no windows. This collections area is heated by

Figure 109. Assessment of kiln stones from Fort Chaffee.

steam, but there is no air conditioning. There is a dead-bolt lock on the main door to the stacks in the hallway. The temporary wood door to the "cage" has a key lock. Fire protection present in the storage area consists only of a smoke detector. A manual fire alarm and a fire extinguisher are located on the other side of the temporary door. No pest management program is in place, but no problems with infestation have been reported.

Records are stored Room 33, an office with a plaster ceiling and a concrete floor covered by adhesive tile. The interior walls are plastered-over ceramic bricks. Five windows are present, each covered by blinds. The windows do have locks, windows are opened to aid in air circulation. This collections area is also at 100% capacity. The building has zoned air and heat to regulate the temperature inside the rooms. The office door is secured with a dead-bolt lock. The only individuals with keys to the office are the registrar, the collections manager, and the other archaeology and anthropology staff members. University Police patrol the area around Walker Hall. Fire protection measures include a smoke detector and fire alarm in the hall outside the office, and a 2-year old audio/visual alarm system including new exit signs and emergency lights. Staff members previously set sticky traps to monitor pests. No problem was ever noted, so the staff removed the traps and are not currently using any type of pest-management program. No signs of infestation were present at the time of the assessment.

Artifact Storage

Artifacts (Table 213), all located in the stacks area, are stored in acidic cardboard boxes on nonmovable metal bookshelves. The shelves are open and accessible from either side. The shelving units measure 17 x 38 x 86 (inches, d x w x h). Each box is labeled with a cardstock card stapled to the lid. The accession numbers and project information are typed on the label. In some cases, site numbers are included. Each box measures 21.25 x16 x 3.5 (inches, d x w x h). Within the boxes, the storage

Table 213.
Percentage by Volume of DoD Artifacts Housed at the University of Arkansas Museum

Material Class	%
Lithics	22.1
Historic Ceramics	16.6
Prehistoric Ceramics	0.0
Fauna	5.0
Shell	0.1
Botanical	0.1
Flotation	0.1
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	3.4
Metal	23.7
Glass	25.7
Textile	0.1
Other	3.1
Total	100.0

Figure 110. Fort Chaffee collections contained in 2- and 4-mil plastic bags.

space is divided into sections by cardboard boxes. Secondary containers are nested inside the smaller boxes. About 75% of the artifacts are stored in 2-mil and 4-mil plastic bags. The 2-mil bags have twist ties (Figure 110). Plastic film canisters and cloth bags with a cotton string closure are also used as secondary containers. None of these bags are labeled on the outside, but paper or cardstock tags have been placed inside the bags. These tags are labeled in pen or pencil with the site number, provenience, project, date, field site number, accession number, and investigator's initials. All artifacts have been cleaned and sorted by accession number or provenience. Where applicable, artifacts are labeled directly in pen with the catalog number.

Human Skeletal Remains

No DoD human skeletal are curated at the University of Arkansas Museum.

Records Storage

DoD records total 3.19 linear feet (Table 214) and are stored in Room 33 directly on immovable wood shelves. The shelves measure 7 x 3 x 72 (inches, d x w x h), and the Fort Chaffee records occupy two shelves.

Paper Records

Records from Fort Chaffee stored in Vol Walker Hall encompass 2.83 linear feet. field notes and artifact lists. Artifact lists are stored in plastic three-ring binders. These are labeled with a typed slip-in paper tag. None of the documents are archivally processed. Most are in good condition, although some reports and binders were dusty on top and on the sides.

Table 214.
Linear Footage of DoD Associated Documentation Housed at the University of Arkansas Museum

Materials	Fort Chaffee
Paper	2.83
Reports	0.35
Oversized*	0.00
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	3.19

* Includes maps and other oversized documents.

Reports

Records comprise 0.35 linear feet of reports. All reports are bound, either with paper or with plastic spirals. They are directly labeled, on the spine, in marker.

Collection Management Standards

The University of Arkansas Museum does not have a written curation policy.

Comments

1. A duplicate copy of all records is curated at the Arkansas Archeological Survey in Fayetteville.

2. Records are arranged in chronological order according to project.

3. Some records contain contaminants such as staples.

Recommendations

1. Artifacts require (a) placement in appropriately labeled archival primary and secondary containers and (b) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, and (c) creation of a finding aid.

3. Create a comprehensive curation policy.

134

University of Connecticut

Thomas J. Dodd Research Center
Storrs, Connecticut

Repository Summary

Volume of Artifacts: 3.46 ft^3

Collection Origin: Camp Rowland Army National Guard Base, Connecticut and Stone's Ranch Army National Guard Base, Connecticut

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.06 linear feet

Collection Origin: Camp Rowland Army National Guard Base, Connecticut and Stone's Ranch Army National Guard Base, Connecticut

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: July 26, 1999

Point of Contact: Dr. Nicholas Bellantoni, Connecticut State Archaeologist

The Connecticut State Museum is presently in the process of moving to a new facility located in the University of Connecticut old Horticulture Sales Building, which is scheduled to open late in the year 2000. Until the new facility is complete, an agreement is in place between the Connecticut State Museum and the Thomas J. Dodd Research Center to house a portion of the museum's collections. The Thomas J. Dodd Research Center on the campus of the University of Connecticut was dedicated in October 1995 to provide a facility for the University of Connecticut Libraries Archives and Special Collections, the Center for Judaic Studies and Contemporary Jewish Life, and Center for Oral History. This facility maintains a collection's repository designed for the storage of rare and unique archival collections with a capacity of 105,600 linear feet of space.

As a result of the agreement with the museum, the Thomas J. Dodd Research Center currently house approximately 3.46 ft^3 of archaeological material and 0.06 linear feet of associated records from cultural resource management projects on two Connecticut National Guard facilities: Stone's Ranch and Camp Rowland (Table 215).

Table 215.
Volume of DoD Archaeological Collections Housed at the University of Connecticut

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Camp Rowland	2.31	0.04
Stone's Ranch	1.15	0.02
Totals	3.46	0.06

Repository

The Thomas J. Dodd Research Center, completed in 1995, is a two-story brick structure with a flat roof, a poured concrete foundation, and a basement "stacks area" designed for the curation of rare and unique archival collections (Figure 111). The square footage of the entire facility is 55,000 ft^2. In addition to serving as a repository for archival materials the center is utilized for a variety of activities including research, public meetings, campus conferences, symposia, and public events.

Figure 111. Exterior of the research center.

Collections Storage Area

The Connecticut National Guard archaeological collections are being stored in the basement stacks area. This large room is located completely below grade and capable of storing 105,600 linear feet of materials on a series of mobile electric space-saver shelving units (Figure 112). Activities within this space are strictly limited to storage of collections. Presently these units are at approximately 25 % capacity. The majority of the collections are archival in nature, however, four rows of shelves are devoted to the storage of archaeological materials. The collection storage room consists of concrete floors, concrete block walls, and a metal ceiling. Since the room is located below grade, there are no windows. Security within the collection storage area is well maintained with controlled access, intrusion alarms wired to the campus police, motion detectors, and key-pad access. Two zone temperature and humidity controls are maintained throughout the building. Within the collection storage area, the ambient room temperature is maintained at 66 degrees with 35% relative humidity, as prescribed for care of the rare

Figure 112. Computer operated space-saver shelving.

document collections. Fire protection consists of smoke detectors, manual fire alarms, a fire suppression system, fire alarms wired into the fire department, and heat sensors. Pest management procedures are in place for the collection storage area, and no evidence of insect or rodent infestation has been found in the collection storage room.

Artifact Storage

Artifacts from both Connecticut National Guard facilities encompass approximately 3.46 ft^3 (Table 216). They are stored on electric movable metal space-saver shelving units. The primary containers consist of one archival Hollinger cardboard box and two acidic cardboard boxes, all measuring 15 x 12.25 x 10 (inches, d x w x h). An adhesive label has been placed on the outside of the Stone's Ranch archival box with the following information: collection name, site name, site number, and notes. The two nonarchival Camp Rowland boxes are directly labeled in pen with the following information: "Box #, Camp Rowland Phase I and II 1998, American Cultural Specialist, Artifacts" (Figure 113).

The Stone's Ranch artifacts are stored in smaller secondary, telescoping lid, nonarchival cardboard boxes with nested tertiary 4-mil zip-lock bags. These interior boxes have adhesive labels

Table 216.
Percentage by Volume of DoD Artifacts Housed at the University of Connecticut

Material Class	Camp Rowland	Stones Ranch
Lithics	6.7	20.0
Historic Ceramics	13.3	6.7
Prehistoric Ceramics	6.7	0.0
Fauna	0.0	1.7
Shell	0.0	3.3
Botanical	6.7	0.0
Flotation	0.0	0.0
Soil	0.0	0.0
^{14}C	0.0	0.6
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.0
Worked Bone	0.0	0.0
Brick	6.7	0.0
Metal	13.3	1.0
Glass	13.3	0.0
Textile	0.0	0.0
Other	0.0	0.0
Total	66.7	33.3

Figure 113. Examples of primary and secondary containers that contain Camp Rowland, Connecticut, artifacts and an example of records storage.

similar to the primary box. The tertiary bags have been directly labeled in marker with the following information: project name, artifact inventory number, and provenience. The artifacts are cleaned, but none are directly labeled.

The Camp Rowland artifacts are stored in secondary 4-mil plastic zip-lock bags with nested tertiary 2-mil zip-lock bags. The tertiary bags have computer generated adhesive labels with the following information: project name, artifact number, unit, centimeters below surface (CMBS), strata, and description. The artifacts are cleaned, but none are directly labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated the University of Connecticut

Records Storage

Associated records (Table 217) from the Connecticut National Guard archaeological collections (0.06 linear feet) are stored in the artifact collection boxes with the artifactual materials. The Stone's Ranch records are loose in the box, but the Camp Rowland documentation is in a manila envelope directly labeled "Camp Rowland Field Documents, Phase I and II, 1998".

Table 217.
Linear Footage of DoD Associated Documentation at the University of Connecticut

Materials	Camp Rowland	Stones Ranch
Paper	0.04	0.02
Reports	0.00	0.00
Oversized*	0.00	0.00
Audiovisual	0.00	0.00
Photographic	0.00	0.00
Computer	0.00	0.00
Total	0.04	0.02

* Includes maps and other oversized documents.

Paper Records

Associated documentation consist of paper records only and includes survey, excavation, and analysis documentation. Although these records are in good condition, they have not been archivally processed, no known finding aids were available, and security copies had not been made of the originals.

Collection Management Standards

The Connecticut State Museum of Natural History is currently in the process of creating a formal curation policy for their collections. In the interim they have been following, and require their contractors to follow, state guidelines for curation and handling of archaeological materials.

Comments

At the time of this curation-needs assessment, the Connecticut State Museum of Natural History was in the process of creating and moving into a new

facility on the campus of the University of Connecticut. During this process they have an agreement with the Thomas J. Dodd Research Center for the storage of archaeological collections in the center's archival "stacks". Although this facility is an excellent repository, it is not the permanent repository for DoD archaeological collections.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies in a separate, fire-safe, and secure location.

135

Heite Consulting

Camden, Delaware

Repository Summary

Volume of Artifacts: 1.87 ft^3

Collection Origin: Naval Weapons Air Station Earle, New Jersey

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear feet of Records: 0.46 linear feet

Collection Origin: Naval Weapons Air Station Earle, New Jersey

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: June 25, 1999

Point of Contact: Edward Heite, President

Heite Consulting is located in Mr. Heite's residence at 21 South Main Street in Camden, Delaware. The repository has Department of Defense (DoD) archaeological collections from Naval Weapons Air Station, Earle, that total 1.87 ft^3 of artifacts and 0.46 linear feet of associated documentation.

Repository

Collections are stored in Mr. Heite's office, which is located within his home. The house, constructed of wood and brick, was built in 1789. The roof is made of asphalt shingles. At the rear of the house, laboratory and office space each occupy a small area.

Collection Storage Area

The objects and documentation are stored within Mr. Heite's office, which is approximately 13 ft^2. The ceiling and carpeted floor is made of wood, and the walls are constructed of sheetrock. There are four windows in the room, all of which are covered with blinds. During warm weather, the windows are opened, although they can be locked. Security for the rooms consists of a key lock. There are no fire protection devices. Although no pests were present, Heite Consulting does not have any pest management procedures.

Artifact Storage

The storage unit is a wood cabinet measuring 35 x 23.5 x 23 (inches, d x w x h). A single door provides access to the cabinet (Figure 114). The artifacts are stored in two nonarchival boxes, one at 9.5 x 8.5 x 4.5 and the other at 17.75 x 12 x 13.5 (inches, d x w x h). Each box has direct marker labeling, indicating the collections' origin. Secondary containers consist of

Figure 114. Cabinet used to store boxes of artifacts.

bubble wrap and nonarchival 2-mil zip-lock bags. Some of the objects are loose in the box, and nonarchival paper has been crumpled and placed around the objects. The zip-lock bags are labeled directly in marker with the lot number. All artifacts (Table 218) are cleaned and approximately 50% are directly labeled in pen with the locus number.

Table 218.
Percentage by Volume of DoD Artifacts Housed at Heite Consulting

Material Class	NWS Earle
Lithics	47.5
Historic Ceramics	31.0
Prehistoric Ceramics	0.0
Fauna	0.0
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	0.0
Metal	0.0
Glass	21.5
Textile	0.0
Other	0.0
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated at Heite Consulting.

Records Storage

Approximately 0.46 linear feet of records from Naval Weapons Air Station, Earle are located at Heite Consulting (Table 219). The records are stored in an archival box measuring 15.75 x 5 x 10.25 (inches, d x w x h) labeled with the collection's origin. The box is stored on a nonmovable wood shelf [24.5 x 17.5 x 45 (inches, d x w x h)] (Figure 115). Pencil-labeled manila folders serve as secondary containers. Additionally, a report copy is located within the box of artifacts. There are no finding aids or accession data for the material.

Table 219.
Linear Footage of DoD Associated Documentation Housed at Heite Consulting

Materials	NWS Earle
Paper	0.25
Reports	0.13
Oversized*	0.08
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.46

* Includes maps and other oversized documents.

Figure 115. Shelf used to hold record collections.

Paper records

The paper records comprise the majority of the collections and include background data and reports. All records are in fair condition, with contaminants of paper clips and binder clips throughout.

Reports

Reports comprise 0.13 linear feet of the collection.

Maps

The maps (0.08 linear feet) are located with the paper records and have been folded to fit within the box.

Collections Management Standards

Heite Consulting is an archaeological contracting firm and is not a long-term curation repository. They do not possess a comprehensive curation plan as they only examine artifacts for analysis purposes.

Comments

1. Mr. Heite indicated that black and white photographs were taken for this project. He was not able to locate these, however.

2. Heite Consulting is not a permanent repository and all recovered material is generally turned over to the sponsor or sponsoring agency.

Recommendations

1. Archaeological materials require (a) consistent direct labeling (when applicable), (b) placing materials in appropriately labeled archival primary and containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging materials in appropriately labeled archival primary and secondary containers, (c) placement of maps in an archival flat file, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, (f) storage of archival paper copies and original negatives to be stored in a separate, fire-safe, and secure location.

3. Locate black and white photographs.

4. Identify a permanent repository for the transfer of the DoD archaeological collection.

136

MAAR Associates

Newark, Delaware

Repository Summary

Volume of Artifacts: 6 ft^3

Collection Origin: Dover Air Force Base, Delaware

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.08 linear feet

Collection Origin: Dover Air Force Base, Delaware

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: June 24, 1999

Point of Contact: Ronald A. Thomas, Owner

MAAR Associates, Inc. is a private consulting firm, with offices in Virginia and Delaware. In 1994 the St. Louis District assessed the Department of Defense (DoD) documentation at the Virginia office (Holland et. al. 1997). In 1999 the St. Louis District visited the Newark, Delaware, offices. The firm does not consider itself a permanent repository for DoD collections; the collections are held until arrangements can be made for transfer to a long-term curation repository. Currently, approximately 6 ft^3 of artifacts and 0.08 linear feet of documentation from two DoD facilities is stored at MAAR Associates.

Repository

The MAAR Associates, Inc. facility occupies a large warehouse in an industrial park (Figure 116). The building has areas for various activities, including office space, artifact holding, artifact processing, artifact temporary storage, and field equipment and supplies storage. The building's foundation, floor, and walls are concrete, and the roof is constructed of asphalt shingles.

Collections Storage Area

Large metal-framed, fiberboard shelves throughout the building are used for artifact storage. The shelves are fiberboard. Access to the building is primarily gained through the single office door, which is key locked. Only MAAR Associates staff has access to the building. Additionally, there is a large garage door that can be opened for supply movement. There are no windows within the warehouse. Central heating provides the only environmental controls within the area; there is no air conditioning.

Figure 116. Exterior of warehouse with door and window leading into MAAR Associates office.

Temperature and humidity are not monitored. The repository does not have any fire protection systems or a pest management program.

Artifact Storage

All DoD artifacts are stored in various sized acidic cardboard boxes (Figure 117). Seven boxes house 6.0 ft^3 of material from Dover AFB (Table 220). Boxes are glued and some are taped. Box security consists of folded flaps. The boxes are inconsistently labeled, but always contain the MAAR Associates project number (D-32 for Dover AFB). Some of the labels are adhesive and some are direct. Secondary containers primarily consist of 2- or 4-mil zip- lock bags. The majority of the bags are not directly labeled; an acidic paper insert provides the site number, project, provenience, investigator, date, and MAAR Associates number for these. All the artifacts have been cleaned and sorted by provenience, but few have been directly labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at MAAR Associates.

Figure 117. Metal shelving units with Dover AFB collections.

Table 220.
Percentage by Volume of DoD Artifacts Housed at MAAR Associates

Material Class	Dover AFB
Lithics	70.3
Historic Ceramics	4.3
Prehistoric Ceramics	2.9
Fauna	1
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	7.1
Metal	12.8
Glass	1.6
Textile	0
Other	0
Total	100

Records Storage

Approximately 0.08 linear feet of documents from Dover AFB are located at MAAR Associates (Table 221). The material is stored within a three-ring binder on metal shelves as described above (Figure 118).

Table 221.
Linear Footage of DoD Associated Documentation at MAAR Associates

Materials	Dover AFB
Paper	0.00
Reports	0.06
Oversized*	0.00
Audiovisual	0.00
Photographic	0.04
Computer	0.00
Total	0.08

* Includes maps and other oversized documents.

Figure 118. Metal shelving units with associated records held in three-ring binders.

Reports

One report copy of MAAR Associates, Inc. project at Dover AFB is located at the repository (0.06 linear feet).

Photographs

Photographic material at MAAR Associates, Inc. consists of 0.02 linear feet of slides housed in archival sleeves within the three-ring binder.

Collections Management Standards

MAAR Associates, Inc. is an archaeological contracting firm and is not a long-term curation repository. They do not possess a comprehensive curation plan as they only examine artifacts for analysis purposes.

Comments

Mr. Thomas indicated that there were photographs taken during the Dover AFB project; however, he could not locate them during the time of our visit.

Recommendations

1. When applicable artifacts require (a) consistent direct labeling, (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) creation of a finding aid, and (c) creation of an archival duplicate copy of paper records, and (d) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Locate Dover AFB photographs.

4. Identify a permanent repository (ies) for the transfer of the DoD archaeological collections.

Editor's Note

As of March 2000 MAAR Associates, Inc. staff note that all Dover AFB collections have been sent to a contractor for processing and subsequent transfer to a long-term curation center.

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Environmental Services

Jacksonville, Florida

Repository Summary

Volume of Artifacts: 1.5 ft^3

Collection Origin: Pensacola Naval Air Station, Florida

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.88 linear feet

Collection Origin: Pensacola Naval Air Station, Florida; Camp Lejeune, North Carolina

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date Of Visit: December 9, 1998

Point of Contact: Marsha Chance, Archaeologist and Senior Project Manager

Environmental Services, Inc. (ESI) has eight offices located throughout the southeastern United States. The Jacksonville, Florida, office (Figure 119), which is the only office that conducts archaeological investigations, is currently storing Department of Defense (DoD) archaeological material and associated documentation from two military installations. These collections are the result of eight investigations on Pensacola Naval Air Station (NAS) and one investigation on Camp Lejeune (Table 222).

Figure 119. The building with Environmental Services offices.

Table 222.
Volume of DoD Archaeological Collections Housed at Environmental Services

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Camp Lejeune	—	0.08
NAS Pensacola	1.5	0.80
Totals	1.5	0.88

Repository

The archaeological collections are located within the offices of ESI in an office park complex. ESI rents

office space in this complex and is situated between other businesses. The building is approximately 6–10 years old, with a concrete foundation and concrete block exterior walls. The roof is comprised of corrugated metal.

Collections Storage Area

The collections are temporarily stored in three locations. Archaeological material is stored in the office space used for a laboratory and processing room, while the associated documentation is either in the library or in a project manager's office. All rooms are carpeted, and the walls consist of wallboard. The offices have suspended acoustical tile ceilings. There are no windows present in these storage rooms. The environmental controls present in the offices consist of central air-conditioning. A heating system is not needed. Key locks on the office doors are the only security measures for the collection storage areas. There were no fire protection devices noted in any of the collection storage areas. A systematic pest management program is not in place, however, there were no signs of a pest infestation in these rooms.

Artifact Storage

Archaeological material, recovered from three of the eight ESI projects conducted on NAS Pensacola , is stored in three acidic cardboard boxes temporarily on a long folding table. The primary containers are three different sized boxes that are labeled directly on with marker and with adhesive labels. The information is legible, but inconsistent. Label information consists of the project name, ESI number, number of bags, number of box, date, and report number. Approximately 75% of the secondary containers housing the archaeological material are plastic zip-lock, 2-mil bags that are showing signs of wear with punctures. The rest of the material is loose within the primary containers. The material is not nested within layers of secondary containers. The percentages of material classes by volume are outlined in Table 223.

Human Skeletal Remains

No DoD human skeletal remains are curated at Environmental Services.

Table 223.
Percentage by Volume of DoD Artifacts Housed at Environmental Services

Material Class	NAS Pensacola
Lithics	0
Historic Ceramics	15
Prehistoric Ceramics	1
Fauna	25
Shell	2
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	15
Metal	30
Glass	10
Textile	0
Other (coal, slate, and concrete)	2
Total	100

Records Storage

Records from DoD installations encompass approximately 0.88 linear feet (Table 224). All records are stored in a standard metal four-drawer lateral file cabinet in the library. The drawers measure 16.5 x 28 x 12 (inches, d x w x h). Individual files are stored in cardstock folders secured with metal clasps. Manila folders are also present in the cardstock project folders. The project folders are labeled with adhesive computer generated paper labels with the ESI project number on them. Field notes are written in hardback field notebooks that contain other project notes as well. A field notebook is used for as many projects as it takes to fill the notebook. The notebooks have labels written directly on the covers and binders of the notebook

Table 224.
Linear Footage of DoD Associated Documentation Housed at Environmental Systems

Materials	Camp Lejeune	NAS Pensacola
Paper	0.08	0.29
Reports	0.00	0.33
Oversized*	0.00	0.08
Audiovisual	0.00	0.00
Photographic	0.00	0.08
Computer	0.00	0.01
Total	0.08	0.80

* Includes maps and other oversized documents.

with pen and marker. They are stored on wooden shelves in a project manager's office.

Paper Records

Paper records, including administrative and survey records, comprise approximately 0.4 linear feet. Some contaminants, such as paper clips, staples, and metal clasps, were noted throughout the collection, but as a whole, materials are in very good condition.

Reports

Approximately 0.3 linear feet of original report documents are present in the project records. The report records are stored with, and in the same manner as, the paper records.

Photographs

Photographs encompass 0.08 linear feet of the collection and are stored in acid-free envelopes with the paper records.

Maps

Project maps, encompassing 0.08 linear feet, are present in the project files. These maps are stored with, and in the same manner as, the paper records.

Computer Records

One computer disk was present in the NAS Pensacola project files (0.01 linear feet). It is labeled with an adhesive paper label. The disk is stored with the paper records in the project files.

Collections Management Standards

Environmental Services is not a permanent curation repository and, therefore, does not have a comprehensive curation plan for the storage of archaeological collections. Archaeological collections are processed and stored in a manner specified in the project's scope of work.

Comments

1. Artifacts and records are arranged by project and are labeled in a consistent manner.

2. The Camp Lejeune project file has been misplaced. It was not located during this assessment, and was not included in the amount of records present for the installation. The artifacts generated (n=142) had recently been sent back to Camp Lejeune. St. Louis District requested a copy of the letter of transmittal but did not receive one.

Recommendations

1. Pensacola NAS artifacts require (a) placing in appropriately labeled archival primary and secondary containers, and (b) insertion of acid-free labels in secondary containers.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of maps in an archival flat file, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies and original negatives to be stored in a separate, fire-safe, and secure location.

3. Identify a permanent repository for the transfer of the DoD archaeological collections.

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Florida Archaeological Services

Jacksonville, Florida

Repository Summary

Volume of Artifacts: 12.45 ft^3

Collection Origin: Jacksonville Naval Air Station, Florida

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 4.93 linear feet

Collection Origin: Jacksonville Naval Air Station, Florida

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date Of Visit: December 10, 1998

Person Contacted: Robert Johnson, President and Archaeologist

Florida Archaeological Services (FAS) is an archaeological consulting firm. They have Department of Defense (DoD) archaeological material in their laboratory repository from projects they recently conducted at Jacksonville Naval Air Station (NAS) (Table 225), the Pinecastle Bombing Range, and the Rodman Bombing Range. The collection (two bags and a field specimen catalog) associated with their work at the Pinecastle Bombing Range is the property of the U.S. Forest Service at the Ocala National Forest. They have a lease agreement with NAS Jacksonville. These materials were, therefore, not examined.

Table 225.
Volume of DoD Archaeological Collections Housed at Florida Archaeological Services

Installation	Archaeological Materials (ft^3)	Records (linear feet)
NAS Jacksonville	12.45	4.93
Totals	12.45	4.93

Repository

FAS is located in two homes within a residential neighborhood. The building housing the laboratory repository was purchased in 1990 (Figure 120). FAS moved into the house approximately six years ago. The house was originally built in 1914 and is a wood frame house with wood siding. The foundation is on brick piles. The roof is comprised of built-up asphalt with tar shingles. There are no signs of water damage.

Collections Storage Area

The collections are temporarily stored in a room that has approximately 180 ft^2 of space with a wood floor

Figure 120. The exterior of the house that contains the offices and laboratory of Florida Archaeological Services.

Figure 121. Archaeological collections from NAS Jacksonville.

that is carpeted. Interior walls are constructed of wallboard and the room has an acoustical ceiling. There are two small, secured windows that are covered with metal blinds. The environmental controls present in the offices consist of central heat and air-conditioning. Security measures for the collection storage area include controlled access, eight staff members with keys to the house, window locks, key and dead-bolt locks on the doors. Fire protection devices noted in the collection storage area consist of a battery-operated smoke detector. A fire extinguisher is present, but not located in the collection storage room. A professional pest extermination service is used to spray the facility annually. There were no signs of a pest infestation in these rooms.

Artifact Storage

Archaeological material recovered from NAS Jacksonville (Figure 121) is stored on a metal shelving unit (Figure 122) that measures 1.5 x 4 x 6 (feet, d x w x h). Prior to this visit, these collections were moved onto a table in a different room for easier examination. The storage area is at approximately 50% capacity, and there is no overstacking of boxes present. Primary containers consist of acidic cardboard boxes and a plastic container holding a partially reconstructed vessel. The labels are inconsistent and are either written directly on the container in marker, or are computer generated labels that have been affixed to the container. The majority of the secondary containers housing the archaeological material are paper bags

Figure 122. Metal shelving unit on which NAS Pensacola collections are usually stored.

(99%) with the remaining 1% comprised of zip-lock plastic 2-mil and 4-mil bags. The material is not nested within layers of secondary containers. The percentages of material classes by volume are outlined in Table 226. All of the archeological material has been cleaned and sorted by field specimen number. Less than 1% of the artifacts have been labeled with black ink on a white surface with the field specimen number.

Table 226.
Percentage by Volume of DoD Artifacts Housed at Florida Archaeological Services

Material Class	NAS Jacksonville
Lithics	1
Historic Ceramics	0
Prehistoric Ceramics	95
Fauna	1
Shell	0
Botanical	0.7
Flotation	0.3
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	1
Glass	0
Textile	0
Other (ochre, hematite)	1
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at Florida Archaeological Services.

Records Storage

Records from Jacksonville NAS encompass approximately 4.93 linear feet (Table 227). All records are stored on a wood shelving unit, in the lab with the boxes of archaeological material, which measures 1 x 4 x 6 (feet, d x w x h). There are no primary containers used to house the records and secondary containers consist of manila folders and binders that are labeled with either adhesive tags or taped labels. Both types of labels are computer generated with the project name and site numbers. A duplicate copy of the documents exists on acid-free paper and on computer hard-drives, disks, and a tape backup. At least one copy of all the documentation is stored off the premises.

Present in one of the binder's sleeves were three small paper bags that contained prehistoric lithic and ceramic artifacts. These materials were currently being stored with the paper documents instead of with the rest of the archaeological materials.

Table 227.
Linear Footage of DoD Associated Documentation at Florida Archaeological Services

Materials	NAS Jacksonville
Paper	3.74
Reports	0.03
Oversized*	0.33
Audiovisual	0.00
Photographic	0.82
Computer	0.00
Total	4.93

* Includes maps and other oversized documents.

Paper Records

Paper records, including survey, excavation, analysis and photolog records, comprise approximately 3.74 linear feet. Some contaminants, such as paper clips, staples, and metal clasps, were noted throughout the collection, but as a whole, materials are in very good condition.

Reports

Approximately 0.03 linear feet of management summaries of site descriptions are present in the project records. The report records are stored with, and in the same manner as, the paper records.

Photographs

Photographic records, including, black and white prints, negatives, and slides encompass 0.82 linear feet of the collection and are stored with the rest of the paper documents.

Maps

Project maps, drawings, and blueprints encompassing 0.33 linear feet are present in the project files. These maps are stored with, and in the same manner as, the paper records. Some of the maps have been rolled and are secured with rubber bands.

Computer Records

All of the project information is stored on computer hard-drives, disks, and tape backups. There is currently an unknown amount of these records. They were not assessed at this time.

Collections Management Standards

FAS is not a permanent curation repository and, therefore, does not have a comprehensive curation plan for the storage of archaeological collections.

Archaeological collections are processed and stored in a manner specified in the project's scope of work.

Comments

Artifacts and records are arranged by project and are labeled in an inconsistent manner.

Recommendations

1. Artifacts require (a) placed in appropriately labeled archival primary and secondary containers, and (b) insertion of acid-free labels in secondary containers.

2. All records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of maps in an archival flat file, (d) creation of a finding aid.

3. Identify a permanent repository for the transfer of the DoD archaeological collections.

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Florida Bureau of Archaeological Research

Tallahassee, Florida

Repository Summary

Volume of Artifacts: 89.33 ft^3

Collection Origin: Cape Canaveral Air Force Station, Florida; Cape St. George, Florida; Eglin Air Force Base, Florida; Pensacola Naval Air Station, Florida; Tyndall Air Force Base, Florida

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 7.83 linear feet

Collection Origin: Cape Canaveral Air Force Station, Florida; Tyndall Air Force Base, Florida

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: 1.77 ft^3

Collection Origin: Cape Canaveral Air Force Station, Florida; Tyndall Air Force Base, Florida

Compliance Status: NAGPRA compliance is complete.

Assessment

Date of Visit: December 1–2, 1998

Point of Contact: Dr. David Dickel, Collections Manager

The Florida Bureau of Archaeological Research (FBAR) is located in Tallahassee, Florida, and serves as the state repository for Florida. Approximately 89.33 ft^3 Department of Defense (DoD) of archaeological collections and 7.83 linear feet of associated documentation from projects conducted on are stored in the repository (Table 228).

Repository

Collections are located on a portion of the fourth floor of the R.A. Gray Building in downtown Tallahassee. The building was constructed in 1975. The FBAR area of the building contains offices and archaeological collection storage areas. The building also contains the Florida Division of Historical Resources, the Florida State Archaeological Site Files, the State Library of Florida, and the Museum of Florida History. The building's foundation is concrete with concrete exterior walls.

Collections Storage Areas

The FBAR collection storage area is approximately 7,925 ft^2. Several small offices are located on one side of the storage area. There are several steel frame, shaded windows. All lights are fluorescent. Although overhead pipes are present, the collections are positioned so that the pipes are not directly over the collections. The floor is concrete with poured concrete interior walls. The room is at 100% of capacity.

Table 228.
Volume of DoD Archaeological Collections Housed at the Florida Bureau of Archaeological Research

Installation	Archaeological Materials (ft^3)	Human Skeleta Remains (ft^3)	Records (linear feet)
Cape Canaveral Air Force Station	15.8	0.99	5.75
Cape St. George	5.21	—	—
Eglin Air Force Base	5.21	—	—
Pensacola Naval Air Station	2.08	—	—
Tyndall Air Force Base	61.03	0.78	2.08
Totals	89.33	1.77	7.83

Security measures include a dead-bolt and key locks on the single entrance door, controlled access, and an intrusion alarm system. After regular business hours, security guards patrol the building. Collections valued at over $500 are stored in an underground vault located in the building. The entire building is wired with fire alarms connected to the Tallahassee Fire Department. Environmental controls consist of central heating and air-conditioning that maintain the building at 71°F year round. Humidity is also controlled. Dust filters are used throughout the building. Fire extinguishers are located throughout the building. The collections storage room has one fire extinguisher and a manual fire alarm system. A professional pest management control service is used once a year to control insects.

Figure 123. Storage area for archaeological materials.

Artifact Storage

Approximately 89.3 ft^3 of DoD artifacts (Table 229) are on storage units consisting of metal shelves that measure 24 x 48 x 89 (inches, d x w x h) (Figure 123). The shelving units are free standing on the floor. Acidic boxes with artifacts are stored on the shelves and are directly labeled in marker and/or have a taped computer generated label attached to the exterior. Information on the label includes the site and accession numbers, provenience, site name, investigator, date, box/bag number, or contents, but is inconsistent. Artifacts in the boxes are contained in zip-lock plastic bags (2- or 4-mil), inside bubble wrap plastic, or styrofoam peanuts. Some of the 2-mil bags are torn or punctured. The bags are directly labeled in marker with the site and accession numbers or have paper labels on the outside of the bags. Nesting of plastic zip-lock bags inside of other plastic zip-lock bags occurs. Glass and plastic containers, newspaper, or an occasional paper bag are also nested. Most of the artifacts have been cleaned. When labeled, the label is written directly in ink and consists of the site or accession number. Ink on whiteout has also been used. Paper artifact labels also occur. When sorted, the artifacts are grouped by material class, site number, or provenience.

Human Skeletal Remains

Human remains were present and are supposedly from 8BR212 (Cape Canaveral Air Force Station) but the provenience is uncertain, and from 8BY3 (Sowell Mound) on Tyndall Air Force Base (Table 230).

The remains from 8BR212 are historic, according to the FBAR. The remains and artifacts are in plastic zip-lock bags (4-mil) that are laying on plastic bubble wrap. Bags are nested. The remains are sorted by isolated find. They are cleaned and not labeled. The remains consist of two reconstructed crania, tarsals, metatarsals, and jaw fragments.

Table 229.
Percentage by Volume of DoD Artifacts Housed at the Florida Bureau of Archaeological Research

Material Class	Cape Canaveral AFS	Cape St. George	Eglin AFB	NAS Pensacola	Tyndall AFB
Lithics	0.0	0.0	1.0	0.0	2.0
Historic Ceramics	4.0	0.0	0.0	0.0	2.6
Prehistoric Ceramics	7.0	2.6	2.6	0.0	18.2
Fauna	0.5	0.6	0.9	0.0	3.6
Shell	0.6	1.9	0.7	0.0	25.4
Botanical	0.0	0.0	0.0	0.0	0.3
Flotation	0.0	0.0	0.0	0.0	4.7
Soil	0.0	0.0	0.0	0.0	1.0
^{14}C	0.0	0.0	0.0	0.0	0.0
Human Skeletal	2.2	0.0	0.0	0.0	2.1
Worked Shell	0.0	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0	0.0
Brick	0.0	0.0	0.0	0.0	0.2
Metal	1.2	0.1	0.0	2.2	3.1
Glass	2.7	0.6	0.0	0.0	3.8
Textile	0.0	0.0	0.0	0.0	0.0
Other (leather, plastic, charcoal, wood)	0.1	0.1	0.6	0.0	0.8
Total	18.3	5.9	5.8	2.2	67.8

Table 230.
Volume of Human Remains from DoD Archaeological Collections Housed at the Florida Bureau of Archaeological Research

Installation	MNI	Provenience	Volume of Skeletal Materials (ft^3)
Cape Canaveral AFS	2	8BR212?	0.99
Tyndall AFB	2	8BY3 (Sowell Mound)	0.78
Total	4		1.77

The remains from 8BY3 are contained in plastic bags and consist of fragments of the cranium, mandible, and vertebrae. Long bone fragments are also present. One check stamped sherd is also present. Four boxes of artifacts from the same site are also present. Whether these artifacts are associated with any burials remains to be determined.

Records Storage

Records from DoD installations (Table 231) are kept on storage units that include a metal lateral file measuring 18 x 30 x 39 (inches, d x w x h) (Figure 124) and two metal file cabinets that measure 28.5 x 18 x 59 (inches, d x w x h) (Figure 125). The lateral files are not labeled. The file cabinets have paper inserts with county information written in marker. Drawers vary in size, lateral file drawers measure 15 x 27 x 10 (inches, d x w x h); file cabinet drawers measure 28 x 16.5 x 11 (inches, d x w x d). Secondary containers consist of manila folders , expandable files, or binders. Labels on these containers are direct or adhesive with information written in marker, pen, typed, or pencil. Label information is inconsistent. Contaminants found in the collection include rubber bands and paper clips.

Table 231.
Linear Footage of DoD Associated Documentation Housed at the Florida Bureau of Archaeological Research

Materials	Cape Canaveral AFS	Tyndall AFB
Paper	4.08	1.52
Reports	0.75	0.04
Oversized*	0.50	0.04
Audiovisual	0.25	0.00
Photographic	0.17	0.48
Computer	0.00	0.00
Total	5.75	2.08

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 5.6 linear feet and consist of administrative, background, survey, excavation, and analysis information.

Reports

Reports measure approximately 0.79 linear feet.

Figure 124. Associated record storage orgainzation in a lateral file.

Figure 125. Associated record storage in metal file cabinets.

Photographs

Photographs measure 0.65 linear feet. Photographic records include black-and-white prints, black-and-white negatives, black-and-white contact sheets, photo logs, and color and black-and-white slides.

Maps

Maps measure approximately 0.54 linear feet and include maps, drawings, and blueprints.

Audiovisual Records

There are six audiocassettes that measure 0.25 linear feet.

Collections Management Standards

The Florida Bureau of Archaeological Research is a permanent curation repository and does not have a comprehensive curation plan.

Comments

Artifacts and records are in need of additional processing in order to comply with 36 CFR Part 79.

Recommendations

1. Artifacts require (a) cleaning, (b) sorting, (b) placement in appropriately labeled archival primary and secondary containers, (c) insertion of acid-free labels in secondary containers, and (d) for bone and metal artifacts, preliminary conservation treatment.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of maps in an archival flat file, (d) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies and original negatives in a separate, fire-safe, secure location.

3. Create a comprehensive curation policy.

Editor's Note

As of March 2000 the Navy has claimed and accepted the human remains from 8BY3.

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Florida State University

Department of Anthropology
Tallahassee, Florida

Repository Summary

Volume of Artifacts: 72.26 ft^3

Collection Origin: Cape St. George, Florida; Eglin Air Force Base, Florida; Naval Coastal Systems Center, Florida; Tyndall Air Force Base, Florida; Pensacola Naval Air Station, Florida

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.65 linear feet

Collection Origin: Naval Coastal Systems Center, Florida; Tyndall Air Force Base, Florida

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: 51.79 ft^3

Collection Origin: Naval Coastal Systems Center, Florida

Compliance Status: A qualified professional should examine materials in order to produce all necessary NAGPRA-compliance documentation.

Assessment

Date of Visit: December 3, 1998

Point of Contact: Ryan Pendleton, Curator

The Department of Anthropology, Florida State University, located in Tallahassee, Florida, serves as one of several university-based repositories in northern Florida. Approximately 72.26 ft^3 of Department of Defense (DoD) artifacts and 0.65 linear feet of associated documentation from projects conducted on DoD installations are located at the university (Table 232).

Repository

The collections repository is in the Bellamy Building, a multi-level structure built in the 1960s, which contains classrooms and department offices. The building's foundation is concrete with concrete block exterior walls.

Collections Storage Areas

Collections are stored in two separate collections areas, rooms G-22A and G-23. The artifacts and records are stored in the same storage area (G22A), whereas skeletal remains are stored separately in G-23.

Room G-22A serves as the main archaeological material storage room (Figure 126) and measures approximately 1,639 ft^2. The floor is tile over concrete with the interior walls a combination of concrete block and brick. No windows are present. Activities in the room include temporary artifact storage, artifact holding, artifact study, and staff offices. Both archaeological and ethnographic collections are present, although none

Table 232.
Volume of DoD Archaeological Collections Housed at Florida State University

Installation	Archaeological Materials (ft^3)	Human Skeletal Remains (ft^3)	Records (linear feet)
Cape St. George	33.79	—	—
Eglin Air Force Base	5.63	—	—
Pensacola Naval Air Station	1.13	—	—
Naval Coastal Systems Center	27.2	51.79	0.52
Tyndall Air Force Base	4.51	—	0.13
Totals	72.26	51.79	0.65

Figure 126. The archaeological collections storage room.

of the ethnographic material is from any DoD installations. The room is at 50% of capacity. Security measures include an intrusion alarm, and key lock, with controlled access to the room key, including physical plant personnel. Fire protection measures include a sprinkler system, smoke detector, and a firewall. The university's physical plant staff provides pest management.

Room G-23 serves as a teaching and research laboratory for osteological studies. Human remains from Sowell Mound (8BY3) are also stored in the room. The floor is tile over concrete. Interior walls are a combination of concrete block and sheetrock. Four windows are present and are covered by metal blinds. Activities in the room include an artifact holding area and artifact study. Only archaeological collections are present. The room is at 100% capacity. Security measures consist of a key lock, with controlled access to the room limited to faculty and graduate students. Environmental controls include central air-conditioning and heat. Fire protection measures include a sprinkler system, and a smoke detector. The university's physical plant staff provides pest management. Human skeletal remains from Naval Coastal Systems Center are the only DoD archaeological materials stored in the room.

Artifact Storage

Artifacts totaling 72.26 ft^3 are housed on metal shelves and metal cabinets (Table 233). Storage units consist of metal shelves that measure 21 x 56 x 81 (inches, w x d x h) or metal cabinets measuring 28.5 x 39.5 x 38 (inches, d x w x h) with some overpacking of boxes on the shelves. The boxes on the shelves are manufactured from acidic cardboard and measure 15.5 x 12.25 x 10.25 (inches, d x w x h). The boxes are directly labeled in marker. The labeling is legible but is inconsistent. Artifacts in the boxes are stored in plastic zip-lock bags varying in thickness between 2- or 4-mil. Although the plastic bags are labeled, the label information is inconsistent. Other containers have been placed inside the plastic bags. Some of the artifacts are cleaned and labeled. For those artifacts that are labeled, the label has been directly applied in ink.

The cabinet drawers measure 1.75 x 17.5 x 26.75 (inches, d x w x h) and are made of baked enamel with a key lock on the cabinet door. Secondary containers include plastic bags and open cardboard box trays. There are also loose artifacts. The drawers are lined in bubble wrap.

Human Remains

Human remains are present from 8BY3 (Sowell Mound) on Naval Coastal Systems Center (Table 234). The remains consist of 22,000 cranial and post cranial fragments contained on 85 drawers that measure 18.75 x 12 x 10 (inches, d x w x h) in two metal cabinets that measure 28.5 x 39.5 x 38 or 28 x 20.25 x 38 (inches, d x w x h). The remains are contained in unlabelled zip-lock plastic bags, 2- or 4-mil thick. They are in good condition. The remains are all labeled with the accession number. The label was directly applied in India ink. According to the labels at least 14 males and nine females are present with age estimates at between 18–50. Metal cabinets

Table 233.
Percentage by Volume of DoD Artifacts Housed at Florida State University

Material Class	Cape St. George	Eglin AFB	NAS Pensacola	Naval Coastal Systems Center	Tyndall AFB
Lithics	0.5	0.7	0.1	0.6	0.0
Historic Ceramics	0.0	0.0	0.4	0.0	0.3
Prehistoric Ceramics	2.7	3.8	0.2	30.3	1.6
Fauna	4.2	0.0	0.0	0.0	0.5
Shell	16.3	0.0	0.0	0.6	1.2
Botanical	2.7	0.0	0.0	0.2	0.0
Flotation	0.0	0.0	0.0	0.0	0.0
Soil	0.0	0.0	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	31.8	0.0
Worked Shell	0.0	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0	0.0
Brick	0.0	0.0	0.0	0.0	0.0
Metal	0.0	0.0	0.0	0.0	0.0
Glass	0.0	0.0	0.2	0.0	0.1
Textile	0.0	0.0	0.0	0.0	0.0
Other (pumice, leather, plastic, charcoal, and wood)	0.8	0.0	0.0	0.2	0.0
Total	27.2	4.5	0.9	63.7	3.7

Table 234.
Volume of Human Remains from DoD Archaeological Collections Housed at Florida State University

Installation	MNI	Provenience	Volume of Skeletal Materials (ft^3)
Naval Coastal Systems Center	167	8BY3 (Sowell Mound)	51.8
Total	167		51.8

or shelves, with approximately 27.9 ft^3 of artifacts from 8BY3, are also present. Whether these artifacts are associated with any specific burials remains to be determined.

Records Storage

Records are present from only two DoD installations including Naval Coastal Systems Center and Tyndall Air Force Base (Table 235). Records from the Naval Coastal System Center are stored in an acidic cardboard box stored in a metal file cabinet. Individual records are stored in an unlabeled manila folder or a plastic zip-lock bag. The records from Tyndall Air Force Base are stored in a box that measures 15.5 x 12.25 x 10.25 (inches, d x w x h) with archaeological materials. All the records are in fair condition with brittle paper. Contaminants include paper clips.

Table 235.
Linear Footage of DoD Associated Documentation Housed at Florida State University

Materials	Naval Coastal Systems Center	Tyndall AFB
Paper	0.25	0.08
Reports	0.21	0.00
Oversized*	0.02	0.00
Audiovisual	0.00	0.00
Photographic	0.04	0.04
Computer	0.00	0.00
Total	0.52	0.13

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 0.33 linear feet and consist of administrative, background, survey, excavation, and analysis.

Reports

Reports measure approximately 0.21 linear feet.

Photographs

Photographs measure approximately 0.08 linear feet and are stored with paper records in a manila envelope or in a box with archaeological materials. Photographic records include black-and-white and color prints, black-and-white negatives, and color slides. The color slides are in nonarchival sleeves.

Maps

Maps measure approximately 0.02 linear feet.

Collections Management Standards

Florida State University's Department of Anthropology, is a permanent curation repository and has a comprehensive curation plan. However, a copy could not be located during this visit.

Comments

1. The cabinets in Room G-23 in which the human skeletal remains from Sowell Mound on Naval Coastal Systems Center are located are unlocked, and access is relatively unrestricted.

2. The artifacts from Sowell Mound stored in G22A are possibly associated funerary objects as defined by the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et seq.). These same objects may contain objects of cultural patrimony and sacred objects. Correlating any of the objects with specific remains is probably unlikely because of bone fragmentation and spatial detail available from all the excavations that have occurred. However, until a thorough review of all the primary documentation, both at Florida State University and elsewhere, is completed, ruling out such a correlation is premature.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in secondary containers.

2. Records require (a) separation from the artifact collection container, (b) removal of all contaminants, (c) packaging in appropriately labeled archival primary and secondary containers, (d) placement of maps in an archival flat file, (e) creation of a finding aid, (f) creation of an archival duplicate copy of paper records, and (g) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. The cabinets containing the Sowell Mound skeletal remains should be locked and access to the keys restricted.

141

Indian Temple Mound Museum

Fort Walton Beach, Florida

Repository Summary

Volume of Artifacts: 3.17 ft^3

Collection Origin: Eglin Air Force Base, Florida

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.77 linear feet

Collection Origin: Eglin Air Force Base, Florida

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: February 19, 1999

Point of Contact: Gail Lynn Meyer, Museum Education Coordinator

The Indian Temple Mound Museum is comprised of the original museum gallery and the laboratory, added on about ten years later (Figure 127). Most of the Department of Defense (DoD) artifacts currently stored at Indian Temple Mound Museum were collected in the 1930s–1950s by local civilian residents (Table 236). The Museum has been curating the collections without a contract or financial assistance from Eglin Air Force Base. The city of Fort Walton Beach is the primary source of funding for the curation of the Eglin collections.

Figure 127. The main entrance to Indian Temple Mound Museum from the gallery.

Table 236.
Volume of DoD Archaeological Collections Housed at the Indian Temple Mound Museum

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Eglin Air Force Base	3.17	0.77
Totals	3.17	0.77

Repositories

All artifacts are normally stored in the gallery of the museum (Figure 128). The walls of the gallery are

Figure 128. Overview of display cases, ceiling, floor and lighting in the gallery.

lined with wood and glass display cases. The museum building was constructed in 1971 as a museum. It has cement block exterior walls, a pre-stressed concrete roof, and a concrete foundation. There are no windows.

Paper records are normally stored in the museum laboratory, which was built in 1983. Similar to the gallery, the laboratory has a concrete foundation and concrete block exterior walls. The roof is made of tar and gravel. Additionally, the laboratory has a linoleum floor, concrete block interior walls, and a suspended fiberglass board ceiling; there are no windows. The laboratory is used for materials/supplies storage, office space, records storage, and minimal artifact conservation work. Central air-conditioning and heat are used to maintain the temperature in the laboratory. The laboratory is on the same system of pest management as the gallery. Museum staff enters and exits the museum through the rear door of the laboratory, which has a dead-bolt lock on it. The intrusion and fire alarm systems installed in the gallery are also in use in the laboratory. Fire extinguishers, manual fire alarms, smoke detectors, and heat sensors are present in the laboratory and gallery.

Collections Storage Area

The Eglin AFB artifacts are normally stored in several different places in the gallery. Exceptional examples of certain artifact types are on display in the gallery in wood exhibit cases with wood frames. Whole ceramic vessels are stored on wood shelves in two closets on either side of one row of display cases (Figure 129). The remaining material is stored in wood cabinets underneath the display cases. The museum gallery has a carpeted concrete floor and a concrete ceiling. Both archaeological and ethnographic collections are held at the museum.

Figure 129. Eglin AFB artifacts are stored in a closet identical to this one.

The collections storage capacity is 100%. The temperature in the gallery is maintained with central air-conditioning and central heat. The museum has a regular pest management program. Museum staff reported sightings of roaches, but they have not affected the collections. Security features include outdoors-automatic lights, an intrusion alarm, key locks on the display glass doors, and a dead-bolt lock on the doors to the building. All outer doors are on the intrusion alarm system, which is wired to the city police department. Fire extinguishers, manual fire alarms, smoke detectors, and heat sensors have been

installed throughout the museum. Fire alarms are wired into the city fire department.

Artifact Storage

About 0.5 ft^3 of the Eglin AFB collections at Indian Temple Mound Museum (Table 237) are on display. The glass and wood display cases measure 34 x 76 x 59 (inches, d x w x h). The artifacts on display are not packed in any type of primary or secondary container. The artifact collections assessed in the laboratory (Figure 130) are normally kept in storage in either a closet or in the cabinets under the display cases. Collections are stored in a wood combination drawers/shelves unit measuring 23.5 x 31.5 x 89.5 (inches, d x w x h). Whole ceramic vessels are stored on foam pads directly on the shelves. Other artifacts are stored in the drawers, which are lined with foam padding. Each shelf and drawer has a typed adhesive label listing the catalog numbers of the artifacts. The remaining Eglin AFB artifacts are packed in nonarchival boxes, which are in twist-tie plastic bags. Secondary containers (10%) consist of nested plastic 2-mil zip-lock and twist-tie bags. Some of the bags have string closures. Additional secondary containers include paper bags (90%), one cigar box, and a jewelry box. Some of the artifacts are loose. The boxes are stored in the wood cabinets under the display cases (Figure 131). The cabinets measure 34 x 34.5 x 19 (inches, d x w x h).

Table 237.
Percentage by Volume of DoD Artifacts Housed at the Indian Temple Mound Museum

Material Class	Eglin AFB
Lithics	35.0
Historic Ceramics	0.0
Prehistoric Ceramics	42.5
Fauna	0.0
Shell	2.5
Botanical	0.1
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	8.5
Worked Bone	7.9
Brick	0.0
Metal	2.5
Glass	1.0
Textile	0.0
Other	0.0
Total	100.0

Figure 130. Eglin AFB artifacts removed from storage in the gallery that will be examined in the laboratory.

Figure 131. Artifacts that are not displayed or stored in a closet are stored under the display cases in these cabinets.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Indian Temple Mound Museum

Records Storage

The Eglin AFB collections comprise paper and photographic records (Table 238). Most of the paper records are stored in a metal filing cabinet. The cabinet measures 28.5 x 18 x 52 (inches, d x w x h). The drawer is labeled "site files all counties" with a typed paper insert. Original site cards are stored in a metal box with a hinged lid. The box is kept on a desk in one of the museum staff's office. Photographic records are stored in archival plastic sleeves in plastic three-ring binders. The binders are stored on a shelf in the museum laboratory.

Table 238.
Linear Footage of DoD Associated Documentation Housed at the Indian Temple Mound Museum

Materials	Eglin AFB
Paper	0.35
Reports	0.01
Oversized*	0.02
Audiovisual	0.00
Photographic	0.39
Computer	0.00
Total	0.77

* Includes maps and other oversized documents.

Paper Records

Approximately 0.35 linear feet of paper records from Eglin AFB are housed at Indian Temple Mound Museum. These records consist of 5 x 7-inch original site cards, copies of the site cards, correspondence and administrative files, analysis sheets, and artifact sketches. The records contain staples and paper clips, but are otherwise in very good condition.

Reports

Approximately 0.01 linear feet of reports are stored with the paper records.

Photographs

Photographic records (0.39 linear feet), consisting of color prints, black and white prints, and slides are stored separate from the paper records.

Maps

Approximately 0.02 linear feet of maps are stored with the paper records.

Collections Management Standards

The Museum does have written curation policies that it adheres to when processing archaeological collections.

Comments

1. The artifacts normally stored in closets or cabinets in the gallery were on countertops and tabletops in the museum laboratory during the assessment.

2. A microfilm copy of all paper records is housed in the vault at Fort Walton Beach City Hall.

3. The Museum staff is in the process of entering collections data into their computer database record-keeping program.

4. An emergency management plan has been established.

5. The roof is scheduled to be replaced in the year 2000.

6. The museum is no longer accepting new collections.

Recommendations

1. Artifacts in storage require (a) cleaning, (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, and (c) placement of maps in an archival flat file.

3. Artifacts on display do not require any rehabilitation. However, if they are ever taken off display and put into storage, they will require the same tasks listed above.

Editor's Note

As of March 2000 museum staff have contacted Eglin Air Force Base for guidance regarding the transfer of Eglin collections from the Temple Mound Museum to Eglin AFB for curation.

142

Key West Art and Historical Society

Lighthouse Keeper's Quarters Museum
Key West, Florida

Repository Summary

Volume of Artifacts: 1 ft^3

Collection Origin: Key West Naval Air Station, Florida

Compliance Status: Artifacts comply with existing federal guidelines and standards for collections.

Linear Feet of Records: None

Human Skeletal Remains: None

Assessment

Date of Visit: April 22, 1999

Point of Contact: Joe Paris, Assistant Director

The Key West Art and Historical Society (KWAHS) is a regional non-profit organization designed to promote the arts and history of the Florida Keys. One of their museums is the Lighthouse Keeper's Quarters Museum. Artifacts on display are the result of an archaeological project conducted during the renovation of the Keeper's Quarters and surrounding grounds, which occurred between 1987 and 1990. The historic military artifacts (Table 239) appear to have been left by the U.S. Navy and U.S. Coast Guard.

Table 239.
Volume of DoD Archaeological Collections Housed at the Key West Art and Historical Society

Installation	Archaeological Materials (ft^3)	Records (linear feet)
NAS Key West	1	—
Totals	1	—

Repository

The archaeological collections are located within the museum display area. The museum resides in what was once the Lighthouse Keeper's living quarters. It was built in 1849 and remained in use until it was decommissioned in 1969. Restoration to this house and the out buildings began in 1987 and was finished in 1990. The museum is constructed of wood frame with wood siding and a brick foundation on corner pillars (Figure 132). The roof is comprised of slate

Figure 132. The museum building was originally the lighthouse caretaker's residence.

tiles. Except for the small receptionist area where gifts and souvenirs are sold, this building is solely dedicated to the display of the region's historical artifacts.

Collection Storage Area

The DoD collections are on display in one of the rooms within the museum. The room has a wood floor, wood walls, and a wood ceiling. There is one window within the room that is not covered, but is secured. There is approximately 200 ft^2 in the room. Environmental controls present include a full heating, ventilation, air-conditioning system with central heat and air-conditioning. Security measures for the facility consist of an intrusion alarm and key locks on the doors. Fire protection consists of fire extinguishers and a smoke detector. A systematic pest management program is in place. Every five years, a tent is erected on the grounds and the artifacts are fumigated. There were no signs of infestation in the collections area.

Artifact Storage

Artifacts are displayed in a case that is made up of a wood laminate base that stands three feet off the ground and has a sealed plexiglass display top (Figure 133). The display is free standing in the middle of the room. There are no secondary containers present and the labels are not visible. All of the material has been cleaned and sorted (Table 240). There were approximately 40 artifacts on display.

Figure 133. Historic artifacts recovered from NAS Key West.

Table 240.
Percentage by Volume of DoD Artifacts Housed at the Key West Art and Historical Society

Material Class	NAS Key West
Lithics	0
Historic Ceramics	30
Prehistoric Ceramics	0
Fauna	0
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	30
Glass	35
Textile	0
Other (plastic and a false tooth)	5
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at the Key West Art and Historical Society Museum.

Records Storage

No DoD associated records are curated at the Key West Art and Historical Society.

Collections Management Standards

The KWAHS does have a collections management plan that they adhere to for all their collections.

Comments

1. DoD artifacts are on display in a secured exhibit case.

2. Original records may reside with the archaeologist who performed the work.

143

Pensacola Archaeology Laboratory

Pensacola, Florida

Repository Summary

Volume of Artifacts: None

Lineal Feet of Records: 5.08 linear feet

Collection Origin: Pensacola Naval Air Station, Florida

Compliance Status: Documentation requires complete rehabilitation to comply with existing Federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: October 27, 1998

Point of Contact: Caleb Curren, Director

The Pensacola Archaeology Laboratory (PAL) located in Pensacola, Florida, serves as a cultural resource management contractor and subcontractor. Approximately 5.08 linear feet of Department of Defense (DoD) associated documentation from projects conducted on Naval Air Station Pensacola are housed at PAL.

Figure 134. Exterior view of the main entrance to "The Castle," in which the Pensacola Archaeology Laboratory has its office.

Repository

The main collections repository is a multi-level building that holds apartments, business offices, exhibit space, and storage areas (Figure 134). The structure was built in 1914 and is 84 years old. Known to the staff as the "Castle" it originally served as a Catholic hospital. The foundation is concrete and the building has plaster interior walls. External walls of the repository are stone-dressed and the roof is modified bitumen membrane. The repository has space for analysis of artifacts and examination of documents. There is a manual pull fire alarm at the main entrance on the west side of the building. There is no fire prevention or detection method in hallway outside of the collections storage area although there is a standpipe with no hose in the hallway.

Collections Storage Area

PAL only stores records from NAS Pensacola. These are stored in a rectangular-shaped room that is located next to an office area (Figure 135). The area encompasses approximately 1,080 ft^2 and has a wood floor that is partially carpeted. Interior walls are plaster painted white or yellow, the ceiling is plaster, and there are five large windows that are not covered. Two of the five windows are missing part of the lock mechanism. Activities in the area consist of artifact processing, artifact analysis, temporary storage of archaeological material, and permanent storage of associated documentation. An office with a cubicle partition, exhibit case with artifacts, library, and map cases are also housed within the collections storage area. A separate artifact washing area is located elsewhere in the building. The room is currently at 75% capacity. Approximately 50 ft^2 of collection space is devoted to archaeological materials and approximately 10 ft^2 is ethnographic.

Figure 135. File cabinets containing associated records from NAS Pensacola.

The storage area has window air-conditioning, two ceiling fans, but no heating methods. No clutter was apparent during the assessment. Dead-bolt locks on the door secure the collections storage area. There are three fire extinguishers under a table near the front door in the storage area. All extinguishers were inspected in September 1998. The building has its own pest management schedule and there were no signs of infestation.

Artifact Storage

There are no DoD artifact collections housed at Pensacola Archeology Laboratory.

Human Skeletal Remains

No DoD skeletal remains are curated at the Pensacola Archaeology Laboratory.

Records Storage

One area of the collection storage room is specifically set aside for records. Records from Pensacola Naval Air Station encompass approximately 5 linear feet (Table 241). All records are stored in one metal file cabinet in drawers that measure 25.5 x 17.75 x 52 (inches d x w x h). Individual files are stored in manila folders that are directly labeled in pen and pencil. Photographs and slides are in a three-ring binder. Slides are in archival sleeves. Black and white photos are in plastic sleeves and color photographs are in nonarchival plastic sleeves. Maps and drawings are folded and in nonarchival manila folders. Computer disks are rubber-banded and laying on top of paper records. No copies of records have been made. According to Mr. Curren, there is “not enough space available at Pensacola Naval Air Station.” A finding aid is currently not available, but is being created.

Table 241.
Linear Footage of DoD Associated Documentation at the Pensacola Archaeology Laboratory

Materials	NAS Pensacola
Paper	3.75
Reports	0.08
Oversized*	0.33
Audiovisual	0.00
Photographic	0.83
Computer	0.08
Total	5.08

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 3.75 linear feet. Some contaminants, such as paper clips, staples, and rubber bands, were noted throughout the collection, but on a whole, materials are in good condition.

Reports

Reports encompass approximately 0.08 linear feet.

Photographs

Photographs encompass approximately 0.83 linear feet of the collection and are integrated with paper records in metal file cabinet drawers.

Maps

Folded maps encompass approximately 0.33 linear feet.

Computer

Computer disks are stored on top of the paper record and total 0.08 linear feet.

Collection Management Standards

The Pensacola Archaeology Laboratory is a temporary curation facility and as such does not possess a comprehensive curation plan.

Comments

Records are arranged by project and are labeled in a consistent manner.

Recommendations

Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) placement of maps in an archival, flat file case, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

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Pensacola Historical Society Museum

Pensacola, Florida

Repository Summary

Volume of Artifacts: 1 ft^3

Collection Origin: Pensacola Naval Air Station, Florida

Compliance Status: Artifacts partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: None

Human Skeletal Remains: None

Assessment

Date of Visit: October 26, 1998

Point of Contact: Sandra Johnson, Director/Curator

The Pensacola Historical Society Museum serves as the repository to preserve collections important to the history of the Pensacola area. Approximately 1 ft^3 of archaeological collections are on loan from projects conducted on Naval Air Station, Pensacola.

Figure 136. Exterior view of the entrance to the Pensacola Historical Society.

Repository

The main collections repository is a two-story structure that holds a reception area, gift shop, and exhibit space (Figure 136). The structure was built in 1882 and was originally used as a saloon. The building has gone through several changes, including use as a grocery and warehouse. The foundation is concrete and the building frame is brick and masonry with brick interior walls. External walls of the repository are constructed of brick and masonry and the roof is shingled. The repository does not have space set aside for analysis of artifacts or examination of documents. The second-story is unused.

Collections Storage Area

All artifacts from Naval Air Station, Pensacola are exhibited in a rectangular-shaped room, which is the main exhibit area (Figure 137). The area encompasses approximately 1,300–1,500 ft^2 and has a concrete floor that is carpeted. Interior walls are brick with the lower five feet partially pine paneled.

Figure 137. Display cases with artifacts from NAS Pensacola.

The ceiling is sheetrock and there are no windows. Two former windows and a door have been removed and covered by cement. Activities in the area consist only of permanent and temporary exhibits of historical, archaeological, and botanical materials. The exhibit area is currently at 75% capacity. The exhibit area has central air-conditioning and central forced-air heating. The exhibit area is serviced by motion detectors and a fire alarm, smoke detectors, key locks on the main door, and clerical staff who control access. There is no formal program for pest management in the exhibit area except for visual examination. There were no signs of infestation.

Artifact Storage

Artifacts on loan from Naval Air Station, Pensacola are stored in a plexiglass and wood exhibit case that contains one glass shelf and measures 34.75 x 83 x 39.5 (inches d x w x h). Artifacts encompass approximately 1ft^3 (Table 242), and are sorted by material type, are cleaned, and some are directly labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Pensacola Historical Society Museum.

Records Storage

No DoD associated records are curated at the Pensacola Historical Society Museum.

Table 242.
Percentage by Volume of DoD Artifacts Housed at the Pensacola Historical Society Museum

Material Class	NAS Pensacola
Lithics	0
Historic Ceramics	50
Prehistoric Ceramics	5
Fauna	0
Shell	0
Botanical	10
Flotation	0
Soil	0
14C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	5
Metal	15
Glass	5
Textile	5
Other	5
Total	100

Collections Management Standards

The Pensacola Historical Society Museum is not a curation facility and as such does not possess a comprehensive curation plan. However, they do have an accession/deaccession and gift plan.

Comments

1. Artifacts are arranged by material type and those observed to be labeled were done so in a consistent manner within the exhibit case.

2. There is a single loan form between the University of West Florida and the Pensacola Historical Society housed at the Pensacola Historical Society Museum.

Recommendations

Directly label (when applicable) any unlabeled artifacts.

145

Prentice Thomas & Associates

Fort Walton Beach, Florida

Repository Summary

Volume of Artifacts: 30.63 ft^3

Collection Origin: Eglin Air Force Base, Florida

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 36.92 linear feet

Collection Origin: Eglin Air Force Base, Florida; Fort Stewart, Georgia

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: February 22, 1999

Point of Contact: Jane Pope, Laboratory Analyst

The DoD collections (Table 243) at Prentice Thomas & Associates (PTA) are stored in two buildings. Artifact and document collections undergoing analysis, being processed for curation, or awaiting transportation to the permanent repository are stored in the laboratory. Project files and other records to be permanently housed at PTA are stored in the main office building.

Table 243.
Volume of DoD Archaeological Collections Housed at Prentice Thomas & Associates

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Eglin Air Force Base	30.63	36.71
Fort Stewart	—	0.21
Totals	30.63	36.92

Repository

The PTA laboratory was built in 1986 or 1987 and was previously used as a dentist's office. Since 1995, PTA has rented the building, which is located on the same street as the main office building. The foundation is concrete, the exterior walls are wood siding, and the roof is asphalt shingles. The floor is carpet over concrete, the interior walls are sheetrock, and the ceiling is plaster. Archaeological collections are stored wherever space is available. All storage space is occupied, but none of the material is to be housed permanently at PTA. Security features include an intrusion alarm wired into the police station, a dead-bolt lock on the front door, and access restricted to about ten individuals.

Associated documentation from Eglin Air Force Base and Fort Stewart is stored in the main office building of PTA. The building was constructed in 1983 or 1984 as a residence and doctor's office. PTA bought the building in 1985. The foundation is concrete, the exterior walls are concrete block, and the roof is made of hipped composition shingles. Records associated with field work conducted by

PTA are stored in three collections storage areas in the main office.

Collections Storage Areas

Artifacts and records (Tables 244 and 245) stored in the laboratory are stored in four area: a work room, Ms. Pope's office, and temporary storage room and the entryway. Collections in the work room are stored in a closet with sliding wood doors and wood shelves. Six boxes and loose collections are located in the closet. The boxes consist of two boxes of artifacts (one archival boxes and one acidic), and four boxes of records (three archival boxes and one acidic), all from Eglin Air Force Base. Additionally, one loose ceramic vessel and 0.7 linear feet of loose paper records, also from Eglin Air Force Base, are store loosely on the shelves in the closet. In this closet are two boxes (1 archival, 1 acidic) of artifacts plus one ceramic vessel from Eglin AFB (Figure 138). One acidic cardboard box and three archival boxes of records, plus 0.7 linear feet of unboxed paper records, from Eglin AFB are also stored in the closet. One window, covered by curtains, is present in the work room, however it is locked and wired to motion detectors.

Adjacent to the work room is Ms. Pope's office. PTA staff using computerized database to catalog artifacts from two acidic boxes of Eglin AFB material. The boxes are kept on the floor so that they are accessible to the analysts. More than half of the DoD artifacts are stored in the temporary storage room. Artifacts are stored in boxes stacked on one metal shelf and three plastic shelves (Figure 139). Approximately 77% of the documents housed in the laboratory are located in the entryway of the front room. This room has one window that is covered with curtains.

Table 244.
Percentage by Volume of DoD Artifacts Housed at Prentice Thomas & Associates

Material Class	Eglin AFB
Lithics	32.2
Historic Ceramics	21.5
Prehistoric Ceramics	25.7
Fauna	2.0
Shell	5.0
Botanical	0.0
Flotation	0.0
Soil	1.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	1.0
Metal	4.2
Glass	5.8
Textile	0.0
Other (fired clay)	1.7
Total	100.0

Figure 138. Department of Defense artifacts in the laboratory.

Figure 139. Unprocessed artifacts in temporary storage.

In the main office building, there are three storage areas: the front office/reception area, a middle office, and a rear office. In the front office, the floor is industrial carpet over tiled concrete. The interior walls are sheetrock and the ceiling is plaster. Windows are present but are sealed shut and covered by blinds. Storage capacity for this area is at 100%. The temperature is maintained by central air-conditioning and heating. Security measures include a key lock on the doors and an intrusion alarm for the offices. Only salaried staff members have keys to the doors. Smoke detectors and fire extinguishers are present, along with fire alarms wired to a security company, who notify the fire department. A contracted pest management company sprays the building monthly. No signs of infestation were evident during the assessment.

The middle office houses collections and the technical editor's office. It has the same environmental controls, pest management system, fire safety measures as those in the front office area. The walls are wallboard, the floor is industrial carpet over concrete, and the ceiling is suspended acoustical. The windows in middle office are not sealed shut, but they are closed, locked, and covered by blinds. Other activities taking place in this middle office are analysis and report preparation.

The rear office of the main office building also serves as a collection storage area. It has the same environmental controls, pest management system, fire safety measures, and architectural elements as those in the front office area. The floor is linoleum tiles over concrete. The windows are locked and covered by blinds. Activities in this rear office include artifact storage as well as map preparation and laboratory storage.

Artifact storage

In the laboratory closet, 12 of the 15 boxes are acidic cardboard. They measure 17.5 x 11.5 x 9 (inches, d x w x h). They are glued and do not have lids. The boxes are labeled with the collection name "FP39" written in marker on an adhesive note. The artifacts are packed in paper grocery bags within the boxes. The paper bags are labeled in marker with the project name, number, and the site number. The bags are folded and secured with a paper clip. About 15% of the artifacts are further packed in 2-mil plastic zip-lock bags within the paper bags. The plastic bags are labeled in marker with the project number, site number, provenience, date, and investigator's initials. About 10% of the artifacts have been cleaned, all are sorted by provenience, and none have been directly labeled. The three other boxes in the closet are archival, glued and folded, with a telescoping lid. The archival box dimensions are 15 x 12.75 x 10.25 (inches, d x w x h). The boxes are labeled directly in marker with the project name and site number. Within these boxes, the artifacts are packed in 4-mil plastic zip-lock bags. Paper tags with the site number, catalog number, provenience, and date, have been inserted into the tertiary bags, which are also plastic zip-locks. All of the artifacts have been washed, sorted by site number, and labeled in pen with the site number and catalog number. A broken ceramic pot in the process of reconstruction has been placed directly on the top shelf of the closet. Some fragments of the pot are in the lid of an acidic cardboard box. The pot and fragments have been cleaned, but they are now dusty. None of the pieces or fragments of the pot have been directly labeled. Artifacts in Ms. Pope's office are packed in five acidic cardboard boxes. The average dimensions of these boxes is 18 x 12 x 10 (inches, d x w x h). The boxes are glued or stapled. None have lids since PTA staff were working with the artifacts during the assessment. One box is labeled in marker with the project, year, and site number; one box is labeled "FP44/Not washed" in marker on an adhesive note; and one box is unlabeled. Secondary containers are 2-mil plastic zip-lock bags labeled in marker with the project, site number, investigator, and provenience or bag numbers. All artifacts are sorted by provenience. The artifacts are not washed or labeled.

In the temporary storage room of the laboratory, Eglin Air Force Base collections are packed in one archival box and 23 acidic boxes. Within the boxes, 60% of the artifacts are bagged in 2 mil plastic zip-lock bags, and 40% are bagged in paper bags. The plastic bags are labeled directly in marker with the project number, site number, provenience, and investigator's initials. The paper bags are labeled directly in marker with the site number only. None of the artifacts are washed or labeled, but all are sorted by provenience.

Human Skeletal Remains

No DoD human skeletal remains are housed at PTA.

Records storage

In the laboratory closet, associated documents from Eglin Air Force Base (Table 245) are stored in four boxes, three archival and one acidic. The three folded archival boxes contain documents printed on acid-free paper that are ready for curation. The boxes measure 15.75 x 12.75 x 10.25 (inches, d x w x h), and have telescoping lids. Two of these archival boxes are stacked on a shelf in the closet, and one is on the closet floor. All three boxes are labeled directly in marker with the contractor's name, project name, excavation numbers, and the contents.

Table 245.
Linear Footage of DoD Associated Documentation at Prentice Thomas & Associates

Materials	Eglin AFB	Fort Stewart
Paper	28.23	0.04
Reports	3.46	0.17
Oversized*	3.51	0.00
Audiovisual	0.00	0.00
Photographic	0.26	0.00
Computer	1.25	0.00
Total	36.71	0.21

* Includes maps and other oversized documents.

One acidic cardboard box without a lid contains additional records. The box measures 17.5 x 11.5 x 9 (inches, d x w x h). Within the box, records are kept in acidic manila file folders labeled directly in pen. The label information is inconsistent. In some cases, "Eglin" is the only information given; in others the excavation or project number and "paperwork-original" or "paperwork-acid free" is noted. Several folders are secured with rubber bands.

The records stored in the front area of the laboratory are kept on a stained wood handmade shelving unit near the front door. All records are compiled in 3-ring binders stored directly on the shelves. The binders have a paper label taped to the spine with the excavation number indicated in marker. The binders and records are in fair condition.

DoD records in main office building are stored in the all three office areas described above. In the front office/receptionist area, records are stored in filing cabinets or in boxes stacked on metal shelves or on top of the filing cabinets (Figure 140). The filing cabinets are letter-sized with four drawers. Each cabinet measures 18 x 15 x 52 (inches, d x w x h). The drawers are labeled with a computer generated

Figure 140. Archivally processed records stored in the main office.

paper insert in a metal folder, and the same type of label is also taped to the corner of the drawer. Each drawer measures 17.75 x 13.25 x 11.5 (inches, d x w x h). Records are in acid-free manila file folders. The folders have both adhesive and direct labels with the project number written in pen and marker. The archival boxes in the front office area measure 15.75 x 12.75 x 10.25 (inches, d x w x h). They are folded and have a telescoping lid. Within each box, records are in acid-free manila file folders. They are labeled directly in pen with the task order number and the contents. The folders are held together with rubber bands. Several linear inches of records are also stored in folded acidic cardboard boxes. They have telescoping lids and measure 15.25 x 12.5 x 10 (inches, d x w x h). The boxes are labeled directly in marker, and are stored on top of a filing cabinet.

In the middle office area, several linear feet of records are stored in 14 plastic three-ring binders. The binders are labeled with a computer-generated colored paper labels; the color of the label denotes the year of the project. The binders are stored on a short metal shelving unit. Computer records are stored in a metal desk drawer. They are not packed in any secondary container.

In the back office, DoD records are stored in three-ring binders, in a filing cabinet, and in cardboard boxes. Binders containing Eglin Air Force Base records are stored on a wood shelving unit that measures 10.25 x 48 x 64 (inches, d x w x h) and on a metal shelving unit (Figure 141) measuring 12 x 35.5 x 70 (inches, d x w x h). The unit has an adhesive labels with the shelf number written in marker. Also stored on the metal shelves is one cardboard box (Figure 141). It has a telescoping lid and measures 15 x 12 x 10.5 (inches, d x w x h). The

Figure 141. Department of Defense project files are stored in plastic three-ring binders in the lab.

box is labeled directly in marker with "Eglin AFB-Misc. projects-closed out." Rubber bands are used to group related files together.

Paper Records

Paper records, which are stored in the both collections areas in the laboratory and in three collections areas in the main office comprise approximately 28.27 linear feet of the collection.

Reports

All reports are housed in the main office. All reports are organized by PTA project number and total 3.63 linear feet.

Maps

Maps, which are stored in one collections area in the laboratory and two collection areas in the main office total 3.51 linear feet.

Photographs

Photographs are stored both buildings and comprise 0.26 linear feet of the collection.

Computer Records

Computer records are stored only in the main office and comprise 1.25 linear feet of the collection.

Collections Management Standards

PTA does not curate archaeological collections. Artifacts and original documentation remain at the repository until they are processed for curation and then transferred to the designated repository. Copies of project records are kept on file, however.

Comments

1. At least one duplicate copy of most records exists, in the form of administrative files and/or computer data. Copies of documents such as bag lists and analysis sheets are on acid-free paper.

2. Duplicate copies of paper records are stored in both the lab and the main office. Eglin Air Force Base has also received a copy of all records.

3. Approximately 93% of the artifacts and 90% of the records at PTA have not yet been fully processed

for curation. Those that have undergone all processing meet federal standards for curation.

4. Several formerly acid-free folders are now acidic due to contamination from acidic documents.

Recommendations

1. Unprocessed artifacts require (a) cleaning, (b) sorting, (c) consistent direct labeling (when applicable), (d) placement in appropriately labeled archival primary and secondary containers, and (e) insertion of acid-free labels in each secondary container.

2. Unprocessed records require (a) removal of all contaminants, (b) placement of maps in an archival, flat file case prior to transfer, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

146

Southeast Archeological Center

Tallahassee, Florida

Repository Summary

Volume of Artifacts: 0.3 ft^3

Collection Origin: Army National Guard Headquarters, St. Croix, U.S. Virgin Islands

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.38 linear feet

Collection Origin: Army National Guard Headquarters, St. Croix, U.S. Virgin Islands

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: December 2, 1998

Point of Contact: Richard Vernon, Collections Manager

The Southeast Archeological Center (SEAC), located in Tallahassee, Florida, provides archaeological field and long-term curation services to national parks in the National Park Service's Southeast Region. Approximately 0.3 ft^3 and 0.38 linear feet of Department of Defense (DoD) artifacts and associated documentation from a project conducted at the Army National Guard Headquarters, Estate Bethlehem, St. Croix, U.S. Virgin Islands, are located at SEAC.

Figure 142. Exterior of the building containing the Southeast Archeological Center.

Repository

The building in which the National Guard collections are curated was built in 1995 (Figure 142). The building has a concrete foundation and concrete block exterior walls. The building serves as SEAC staff offices and as a collections repository.

Collections Storage Area

Dr. Mike Russo's office serves as the storage area for the National Guard collection (Figure 143). The office has four windows with metal blinds. The

Figure 143. Archaeological collection from National Guard Headquarters, U.S. Virgin Islands.

windows are sealed and cannot be opened. The office is approximately 155 ft^2. The building's central air-conditioning and heat serves the office. There is a key lock on the office door. Fire protection is provided by a sprinkler system.

Artifact Storage

The artifacts from Estate Bethlehem, St. Croix, are stored on a metal and wood desk in an archival cardboard box that measures 15 x 11.5 x 3 (inches, d x w x h). Ken Wild, a National Park Service archeologist at Virgin Islands National Park, mailed the box to Dr. Russo. Ken Wild conducted the fieldwork that produced the collection. Within the box, the artifacts are stored in zip-lock plastic bags. The artifacts occupy approximately 0.3 ft^3 (Table 246). They have been cleaned but not labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Southeast Archeological Center.

Records Storage

Records from Estate Bethlehem, St. Croix, occupy approximately 0.38 linear feet (Table 247). All records are stored in the same archival box as the two artifacts. Individual files are stored in manila folders that are directly labeled in marker.

Paper Records

Paper records measure approximately 0.08 linear feet and consist of survey notes and a report. The records are in good condition.

Table 246.
Percentage by Volume of DoD Artifacts Housed at the Southeast Archeological Center

Material Class	Estate Bethlehem
Lithics	5
Historic Ceramics	0
Prehistoric Ceramics	0
Fauna	0
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	95
Glass	0
Textile	0
Other	0
Total	100

Reports

A single report (0.02 linear feet) is located with the collection.

Photographs

Color slides measure approximately 0.25 linear feet and are stored in two slide boxes.

Computer Records

One 3.5-inch disk (0.02 linear feet) is present in the collection.

Collections Management Standards

The Southeast Archeological Center is a permanent curation repository and has a comprehensive

Table 247.
Linear Footage of DoD Associated Documentation Housed at the Southeast Archeological Center

Materials	Estate Bethlehem
Paper	0.08
Reports	0.02
Oversized*	0.00
Audiovisual	0.00
Photographic	0.25
Computer	0.02
Total	0.38

* Includes maps and other oversized documents.

curation plan. However, because the collections fall outside the SEAC scope they do not intend to curate the National Guard collection.

Comments

The collection from the National Guard headquarters site should be relocated because SEAC does not want to curate the collection. Permanent curation arrangements should be made with another curation repository in Florida if such a repository is unavailable in the U.S. Virgin Islands.

Recommendations

1. The artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in secondary containers.

2. The records require (a) separation from the artifact collection container, (b) packaging in appropriately labeled primary and secondary containers, (c) creation of a finding aid, (c) creation of an archival duplicate copy of paper records, and (d) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Identify a permanent repository for the transfer of the DoD archaeological collection.

147
Florida Museum of Natural History
University of Florida
Gainesville, Florida

Repository Summary

Volume of Artifacts: 373.36 ft^3

Collection Origin: Cape Canaveral Air Force Station, Florida; Naval Submarine Base, Kings Bay, Georgia

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Inches of Records: 34.08 linear feet

Collection Origin: Cape Canaveral Air Force Station, Florida; Naval Submarine Base, Kings Bay, Georgia

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: 4.58 ft^3

Collection Origin; Cape Canaveral Air Force Station, Florida; Naval Submarine Base, Kings Bay, Georgia

Compliance Status: A qualified professional should examine materials in order to produce all necessary NAGPRA-compliance documentation.

Assessment

Date of Visit: December 7–8, 1998, and February 25, 1999

Points of Contact: Dr. Jerald Milanich, Distinguished Curator, Scott Mitchell, Prehistoric Florida Archaeology Collections Manager, and Sylvia Scudder, Environmental Archaeology Collections Manager

The Florida Museum of Natural History, University of Florida, is located in Gainesville, Florida, and serves as one of several university-based repositories in northern Florida. Approximately 373.4 ft^3 Department of Defense (DoD) artifacts and 34.08 linear feet of associated documentation from projects conducted on Cape Canaveral Air Force Station and Naval Submarine Base, Kings Bay are stored in the museum (Table 248). A portion of the collections from Kings Bay Naval Submarine Base were left at or mailed to the museum by Dr. William Adams after the project was completed. Dr. Adams

Table 248.
Volume of DoD Archaeological Collections Housed at the University of Florida

Installation	Archaeological Materials (ft^3)	Human Skeletal Remains (ft^3)	Records (linear feet)
Cape Canaveral AFS	4.59	0.57	0.08
NSB Kings Bay	368.77	4.01	34
Totals	373.36	4.58	34.08

was the project director. Thus, these materials were never included in the curation agreement between the Navy and the museum.

Repositories

Dickinson Hall houses collections in a large open area known as "The Range" or in two separate rooms on the same floor. Dickinson Hall is a multi-level structure that is partially built into the side of a hill. It contains museum offices, laboratories, and archaeological collection storage areas. The building's foundation is concrete with concrete block exterior walls.

The second repository, which is located elsewhere on the University of Florida campus is the Pole Barn, and was built sometime in the 1940s or 1950s. In the mid-1980s, the museum began to use the Pole Barn to store archaeological collections including those from DoD installations. The Pole Barn has a concrete foundation and wood slat siding.

Collections Storage Areas

A large room in Dickinson Hall known as "The Range," serves as the main archaeological storage area and measures approximately 7,316 ft^2. The floor is concrete with poured concrete interior walls. Windows are absent. Both archaeological and zooarchaeological collections are present. The room is at 100% capacity. Environmental controls include heating, ventilation and air-conditioning that are zoned for the collections storage room. Relative humidity levels are monitored and controlled.

Security measures include a key lock on multiple doors that lead into the area, controlled access for visitors during regular business hours and for staff after hours. Fire protection measures include a smoke detector, manual fire alarms, fire alarms wired to the fire department, and heat sensors. The university provides pest management. At least several times a year the entire building is vacated, then fumigated, to kill any pests that may be present.

The Analysis Cards Storage Room, which is also in Dickinson Hall, has a concrete floor with sheetrock walls and a poured concrete floor. Windows are absent. The room is 527 ft^2. Activities that occur in the room include records study and storage. Analysis cards for both archaeological and zooarchaeological collections are located in the room. The room is at 100% capacity. Security measures include a 24-hour guard, dead-bolt lock, key lock, and controlled access. There is no fire protection. A computerized copy of the records exists.

The Record Storage Room, or Room 125, in Dickinson Hall has a concrete floor with wallboard walls and a concrete floor. Windows are absent. The room is 90 ft^2. The room is used for archaeological records storage. The room is at 100% capacity. Security measures include an intrusion alarm, a key lock, and controlled access. There is no fire protection. There are no copies of the records.

The Pole Barn has two rooms, only one of which, the western-most room, contains DoD collections. The western-most room measures approximately 342 ft^2. The floor is concrete with wood interior walls. Two windows are present, but have been boarded up. The tin roof of the building serves as the room "ceiling." Both archaeological and zooarchaeological collections are present. The room is at 100% capacity. There are no environmental controls. Security measures include a padlock on the exterior door to the building's single entrance and a padlock on the perimeter fence surrounding the building. A fire extinguisher is present and was recently inspected. Spraying for pests may occur monthly, although spider webs are present. Zooarchaeological materials from Naval Submarine Base, Kings Bay are stored in the Pole Barn.

Artifact Storage

Artifact storage in Dickinson Hall (The Range) consists of metal storage cabinets that measure 28.5 x 19 x 37 or 28 x 39.5 x 38 (inches, d x w x h) or for the zooarchaeological collections, wood cabinets measuring 29 x 38.5 x 39 (inches, d x w x h) (Figure 144). Both types of cabinets have been placed on the frame of a movable storage system unit. Each cabinet door has a typed adhesive label with the location of the cabinet in the repository. A sliding latch lock is present on each door. Within each cabinet are drawers measuring 27.5 x 18 x 2 (inches, d x w x h) containing archival boxes with plastic covers. When a label is present for a drawer, it is computer generated on paper, written on masking tape, or taped paper. Information on the labels is not always correct. The boxes are directly labeled in pen, marker, or pencil with one or more of the following, site number, catalog number,

Figure 144. Interior shelving of a typical cabinet containing zooarchaeological materials.

Figure 145. Archaeological collections stored on the base of a movable storage unit.

accession number, the site name, provenience, or field specimen number. Artifacts are also contained in zip-lock plastic bags (2- or 4-mil) or are stored loose in a drawer. When nesting of containers occurs within a box, plastic bags, plastic vials, glass baby food jars, aluminum foil, and paper towels have been used. All the artifacts have been cleaned. Those artifacts that are labeled, are directly labeled in pen or India ink with the catalog number or field specimen number. Whiteout has also been used.

In addition to the cabinets, artifacts are stored in nonarchival boxes that rest directly on the plywood base of the movable storage unit frame (Figure 145) or are stored on top of cabinets. The boxes are several different sizes (4.5 x 12 x 6.5 inches, d x w x h to 20 x 15.5 x 21.25 inches, d x w x h). Human bone is contained in two of these boxes. Inside the boxes are plastic bags (1-, 2- or 4- mil) and cardboard boxes. The bags and boxes have adhesive labels, or are directly labeled in marker or pen with the site number, provenience, site name, or box number. Bags are also nested inside of the primary containers. Large artifacts are wrapped in paper.

Artifacts are also stored in nonarchival boxes of different sizes in a nonmovable metal shelving unit that measures 24 x 48 x 88 (inches, d x w x h) in a hallway in The Range. The boxes are directly labeled in pen or maker. Inside the boxes, paper and plastic bags, newspaper, and cardboard boxes are used to hold artifacts. However, some artifacts are only identified with a tag secured to the artifact by a piece of string. There are also bags inside of the cardboard boxes. A diversity of material classes are present (Table 249).

Table 249.
Percentage by Volume of DoD Artifacts Housed at the University of Florida

Material Class	Cape Canaveral AFS	NSB Kings Bay
Lithics	0.0	0.3
Historic Ceramics	0.0	11.0
Prehistoric Ceramics	1.0	13.2
Fauna	0.0	7.1
Shell	0.0	22.4
Botanical	0.0	0.0
Flotation	0.0	0.0
Soil	0.0	1.6
^{14}C	0.0	0.0
Human Skeletal	0.3	7.2
Worked Shell	0.2	0.0
Worked Bone	0.0	0.0
Brick	0.0	1.4
Metal	0.0	7.0
Glass	0.0	22.0
Textile	0.0	0.0
Other[1]	0.0	5.3
Total	1.5	98.5

[1] Other includes steatite slabs, kaolin pipe stems, corral, rubber, and coquina.

Storage units in the Pole Barn consist solely of metal shelves that measure 38 x 76 x 78 inches, d x w x h)(Figures 146 and 147). On these shelves are acidic cardboard boxes of various sizes, some which have compression damage. Dust is also common on the boxes. Inside the boxes are plastic bags (4-mil) with wire closures. Inside these plastic bags are newspaper and other plastic bags. None of the artifacts have been cleaned or labeled although they have been sorted by material type.

Figure 146. Exterior of the "Pole Barn".

Figure 147. Archaeological material storage in the "Pole Barn".

Human Skeletal Remains

Human remains were present from Cape Canaveral Air Force Station and Kings Bay Naval Submarine Base (Table 250). The remains from Mound BR-86 are located in an archival box that has been placed inside a metal drawer. The remains are in good condition. The remains have been cleaned and are directly labeled in pen. The remains consist of 32 fragments including long bones, rib, the cranium, vertebrae, and the pelvis.

Table 250.
Volume of Human Remains from DoD Archaeological Collections Housed at the University of Florida

Installation	MNI	Provenience	Volume of Skeletal Materials (ft^3)
Cape Canaveral AFS	1	Holmes Mound, BR-86	0.57
NSB Kings Bay	2	9CAM172	4.01
Total	3		4.58

The remains from 9CAM172 are located in two acid cardboard boxes that are stored on a movable storage unit. The remains are in good condition and consist of two crania, teeth, unidentified fragments, and long bones. None of the remains are labeled. The minimum number of individual is two. The antiquity of these remains needs to be determined.

Records Storage

Records from DoD installations (Table 251) are housed in storage units that vary in size (16 x 18.25 x 7 or 20.5 x 43.5 x 55.75 inches, d x w x h) and include lateral file and file cabinets (Figure 148). The storage units have adhesive or direct labels or paper inserts with information written in pen, marker, or typed. Drawers also vary in size (20.5 x 13 x 43.5 or 8.5 x 6 x 16 inches, d x w x h). When secondary containers are present, the records are stored in acid-free paper envelopes, plastic binders, manila folders, and cardboard boxes. Labels on these containers are direct or adhesive with information written in marker, pen, or typed. The records are in good condition. Contaminants include paper clips and staples.

Table 251.
Linear Footage of DoD Associated Documentation Housed at the University of Florida

Materials	Cape Canaveral AFS	NSB Kings Bay
Paper	0.04	22.94
Reports	0.04	6.25
Oversized*	0.00	1.98
Audiovisual	0.00	0.00
Photographic	0.00	2.42
Computer	0.00	0.42
Total	0.08	34.00

* Includes maps and other oversized documents.

Figure 145. Associated documentation storage.

Records from NSB Kings Bay are also located on the plywood base of a movable storage unit or in an acidic box in The Range. The records are stored either loose on the base of the frame or in an acidic box. The box has a plastic coated, paper laser printed label. Contaminants include rubber bands and paper clips. The records are in poor condition. Records from both Cape Canaveral AFS and NSB Kings Bay are also located in the Records Analysis Cards room. The records are stored in metal drawers within metal cabinets.

Paper Records

Paper records comprise approximately 22.98 linear feet and consist of administrative, background, survey, excavation, and analysis information.

Reports

Reports comprise approximately 6.29 linear feet of the collection.

Photographs

Photographs measure 2.42 linear feet and are stored in a box. Photographic records include black-and-white prints, black-and-white negatives, black-and-white contact sheets, color slides, and photo logs.

Maps

Maps measure approximately 1.98 linear feet and include maps, drawings and blueprints.

Computer Records

Five nine-track tapes are present measuring 0.42 linear feet.

Collections Management Standards

The Florida Museum of Natural History, University of Florida, is a permanent curation repository and does not have a comprehensive curation plan.

Comments

1. All of the DoD collections should be immediately moved from the Pole Barn and stored with the other DoD archaeological collections in "The Range" to prevent their continued deterioration.

2. The Florida Museum of Natural History is not interested in curating the Kings Bay Naval Submarine Base collections and would like to transfer them to the University of Georgia's Museum of Natural History.

3. If more information is needed on the Kings Bay NSB collections that were sent to or left at the museum by Dr. William H. Adams, he should be contacted as soon as possible. The human remains that are part of this collection have not been reported as part of any Native American Graves Protection and Repatriation Act summary or inventory.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, (d) insertion of acid-free labels in secondary containers, and (e) for bone and metal artifacts, preliminary conservation treatment.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Implementation of NAGPRA summary and inventory requirements are required for the Naval Submarine Base, Kings Bay human remains.

4. Create a comprehensive curation policy.

5. Identify a permanent repository for the transfer of the Naval Submarine Base, Kings Bay archaeological collection.

148

The University of West Florida

Pensacola, Florida

Repository Summary

Volume of Artifacts: 703.24 ft^3

Collection Origin: Naval Air Station, Pensacola, Florida

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 14.51 linear feet

Collection Origin: Naval Air Station, Pensacola; Florida; Tyndall Air Force Base, Florida

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: 0.64 ft^3

Collection Origin: Naval Air Station, Pensacola

Compliance Status: Materials should be examined by a qualified professional in order to comply with the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et. seq.).

Assessment

Date Of Visit: October 27 to October 29, 1998

Point of Contact: Dr. Elizabeth Benchley, Associate Director, Archaeology Institute

The University of West Florida, located in Pensacola, Florida, serves as a repository for archaeological collections from the western Florida panhandle. Approximately 703.24 ft^3 of artifacts. 0.64 ft^3 of human remains, and 14.51 linear feet of Department of Defense (DoD) associated documentation from projects conducted on Naval Air Station, Pensacola and Tyndall Air Force Base are housed at the university (Table 252).

Table 252.
Volume of DoD Archaeological Collections Housed at the University of West Florida

Installation	Archaeological Materials (ft^3)	Human Skeletal Remains (ft^3)	Records (linear feet)
NAS Pensacola	703.24	0.64	14.47
Tyndall AFB	—	—	0.04
Totals	703.24	0.64	14.51

Repository

Archaeological materials (Table 253) are stored or are located in three separate buildings on the University of West Florida campus. The buildings are Building 11, Building 49, and Building 80. Building 11, also known as the College of Arts and Sciences building, contains offices and classrooms. The building was built sometime in the 1960s as part of the original construction associated with the

Table 253.
Percentage by Volume of DoD Artifacts Housed at University of West Florida.

Material Class	NAS Pensacola
Lithics	0.0
Historic Ceramics	29.7
Prehistoric Ceramics	0.0
Fauna	11.2
Shell	10.0
Botanical	14.3
Flotation	0.0
Soil	0.1
^{14}C	0.8
Human Skeletal	0.2
Worked Shell	0.0
Worked Bone	0.0
Brick	8.7
Metal	20.4
Glass	3.4
Textile	0.0
Other (historic beads, pipe fragments, and a door knob)	1.2
Total	100.0

University of West Florida (UWF) campus. The foundation is concrete with brick exterior walls. The roof is asphalt. A foyer on the east side of the building contains a glass exhibit case with a wooden base containing artifacts and records from the excavations at Naval Air Station, Pensacola. The foyer is part of the Department of Sociology and Anthropology's space in the building.

Building 49 is a window-less Butler building constructed in the 1960s as a machine shop, but was later converted into a collections storage and conservation laboratory. The walls and ceiling are corrugated metal and the foundation is concrete. Uncovered insulation located under the roof serves as the "ceiling." Pest control is provided by a university hired contractor. The building is divided into three rooms that have no official designation. For this chapter, they are designated as the Archives room, the Collections Storage room, and the Conservation Laboratory.

Building 80 contains the main offices of the Archaeology Institute, archaeological materials processing space, and collections storage space. The building is a three room Butler building constructed in 1981 for the sole use of the Institute. The three rooms are designated 101, 102, and 103. The building measures approximately 5,220 ft^2. The building's foundation is concrete, with exterior walls and roof of corrugated metal. Two garage doors are present, one on each end of the building's south wall. Each garage door contains two small, uncovered windows that are embedded into the door itself. The windows cannot be opened. Covered skylights are present.

Collection Storage Areas

The foyer in Building 11 measures approximately 405 ft^2. It has sheetrock walls, a suspended acoustical ceiling, and 14 uncovered windows. Security in the foyer and building is provided by a lockable door. Environmental controls consist of central heat and air-conditioning. There were no fire protection devices in the immediate vicinity of the exhibit case. Unshielded and working fluorescent lights are located inside the case.

Three rooms in Building 49 house DoD Collections, the Archives Room, the Collections Storage Room, and the Conservation Laboratory. The Archives Room, which measures approximately 1,377 ft^2, has only records. The room has an opaque skylight. Security into the room is provided by a key lock on the door to the outside, an intrusion alarm, motion detectors, and controlled key access. Environmental controls include central air-conditioning and forced-air heat. Fire protection is provided by manual fire alarms, fire doors, smoke detectors, a fire wall, and fire alarms that are wired to campus security that can then call the fire department if needed.

The Collections Storage Room is approximately 3,168 ft^2. Two metal hatchways in the roof were closed during our visit. Only archaeological materials are stored in the room. The room is approximately at 75% capacity. Security is provided by key locks on two interior doors, a retractable garage door located along an outer wall, and motion detectors. Fire protection includes manual fire alarms, fire doors, fire walls, and handheld fire extinguishers.

The Conservation Laboratory measures approximately 1,512 ft^2. Insulation has been placed against the outer walls, although there is no insulation underneath the metal roof. Three opaque skylights are present. Activities in the room include artifact holding, artifact washing, processing, and conservation, hazardous material storage, and materials/supplies storage. Several different metal

tanks are used to conserve artifacts of various sizes. The only environmental control is provided by a natural gas heater suspended from the roof and an exhaust fan in one wall. Security is provided by a dead-bolt lock on an outer door, key locks on internal doors, a lockable garage door, and metal grills on vents in the side walls. Fire protection consists of manual fire alarms, fire door, fire extinguishers, fire wall, and a fire alarm wired into campus security.

In the three rooms of Building 80, environmental controls consist of a central air-conditioning system that the staff says does not work well and forced-air heat. Security consists of key locks on the one entrance door and the two garage doors. Fire protection consists of hand-held fire extinguishers. A university-hired contractor sprays for pests on a set schedule or as needed. Room 101 measures approximately 1,350 ft^2, with approximately half the area devoted to the storage of archaeological materials. The room serves both as an archaeological materials storage area and as a materials/supplies storage area. The room is 75% filled to capacity. Spider webs are present on the shelving units.

Room 102 measures approximately 1,080 ft^2. The room is used for records storage and staff offices. The room is approximately at 75% storage capacity. The windows in Room 102 can be opened and have individual locks.

The "L" shaped Room 103 measures approximately 2,790 ft^2, and less than half the space is devoted to the storage of archaeological materials and records. Activities in the room include artifact holding, artifact processing, temporary artifact storage, materials/supplies storage, artifact study/ teaching laboratory, records study, records storage, and photographic storage. The tables used for artifact study/laboratory/ classroom activities and the area used for digitizing maps occupy the other half of the room. Plastic lunchroom trays with analyzed/ unanalyzed artifacts are held in a custom made, movable, wooden rack unit.

Artifact Storage

In Building 11, the only collections are contained in a glass exhibit case with a wood base (Figure 149). The case measures 16 x 60 x 66 (inches, d x w x h), and contains artifacts, photographs, maps, and a drawing from excavations at Naval Air Station,

Figure 149. Exhibit case with artifacts from NAS Pensacola.

Pensacola. It is unknown if the artifacts are directly labeled, as the assessment team did not have direct access to them.

In Building 49, the Collections Storage Room and the Conservation Laboratory contain archaeological materials. They are stored on metal shelving units that measure 37 x 48.5 x 121(inches, d x w x h). Primary containers consist of archival cardboard boxes that measure 16 x 13 x 9 (inches, d x w x h) (Figure 150). Within the boxes, archaeological materials are contained in decreasing frequency, plastic zip-lock bags, plastic containers, cardboard boxes, paper towels, and newspaper. Approximately 50% of the artifacts are clean and approximately 10% are directly labeled. Artifacts are sorted by type and provenience. Labels are directly applied in pen and label information is consistent. Additional collections consist of nails undergoing electrolysis in a water filled tank that measures 14 x 50 x 50 (inches, d x w x h) (Figure 151), nails in a

Figure 150. Wooden shelves used for archaeological material storage.

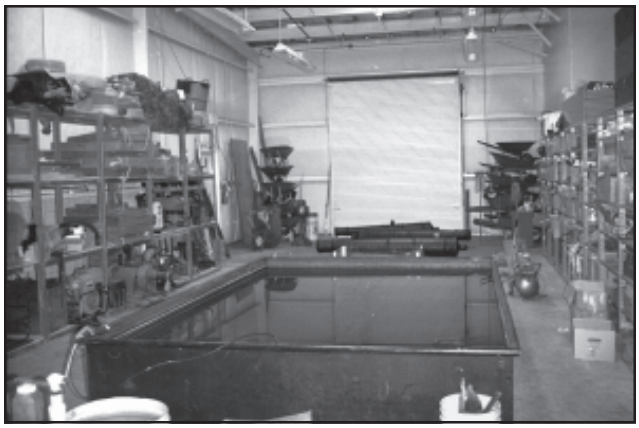

Figure 151. Overview of Conservation Laboratory.

water-filled plastic bucket waiting to undergo electrolysis, and three Spanish cannons measuring (108 x 20 inches, l x w) (Figure 152) that have finished electrolysis and are now drying. The cannons are resting on wood blocks located on the floor.

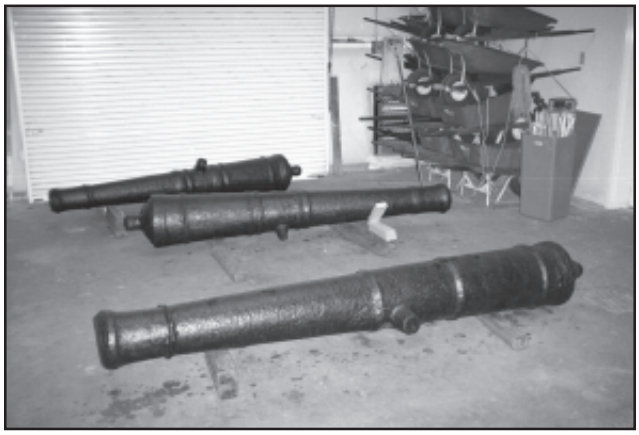

Figure 152. Three Spanish cannons.

In Building 80, collections are stored on wood and metal shelving units of various sizes and six wooden pallets that measure 48 x 40 x 5 (inches, d x w x h) resting on the floor (Figures 153 and 154). The archaeological materials on the shelving units are stored in acid-free and acidic boxes that measure 16 x 13.5 x 10.25 (inches, d x w x h), or on plastic trays. Within the boxes, artifacts are contained in plastic zip-lock bags, other plastic containers, tin containers, and film canisters. The artifacts, when sorted, are sorted by provenience, and approximately 90% are cleaned and approximately 60% are labeled. Labels are directly written on the artifacts in pen or are written on paper labels. Label information is consistent. The archaeological materials on the wooden palettes consist of drying botanical samples.

Figure 153. Archaeological collections storage.

These samples are contained in open, burlap sacks

Figure 154. Unprocessed soil samples from NAS Pensacola.

within which a white plastic bag has been placed to hold the sample. All the samples require processing.

Human Skeletal Remains

DoD human skeletal remains are part of the artifact collection at the University of West Florida. These materials were examined as part of the overall artifact curation needs-assessment. The material should be examined for compliance with the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et. seq.).

Records Storage

In Building 11, the records (Table 254) are contained in a glass exhibit case and consist of three photographs, maps, and a drawing. Records in Building 49 are stored on metal shelves measuring 17.5 x 36 x 75 (inches, d x w x h), in a locked file

cabinet measuring 30 x 17 x 54 (inches, d x w x h), and on a folding table (Figure 155). The records on the metal shelves are stored in archival boxes that measure 12.5 x 5.5 x 10.5 (inches, d x w x h). In the box, the records are in pencil labeled manila folders. The records in the file cabinet are stored in nonarchival manila or fan folders. The maps on the folding table are rolled and secured by rubber bands or are rolled and stored inside cardboard mailing tubes. The tubes are directly labeled in marker, but the labeling information is inconsistent.

In Building 80, records (Table 254) are contained in either metal file cabinets, on metal shelves, or in a metal map case. Within these containers, records are located in manila folders and plastic three-ring binders. Site maps from Santa Maria de Galve (8ES1354) have been digitized. A finding aid exists for the drawings from the 1998 field season.

Table 254.
Linear Footage of DoD Associated Documentation Housed at the University of West Florida

Materials	NAS Pensacola	Tyndall AFB
Paper	12.47	0.02
Reports	0.02	0.00
Oversized*	0.35	0.02
Audiovisual	0.17	0.00
Photographic	0.00	0.00
Computer	1.46	0.00
Total	14.47	0.04

* Includes maps and other oversized documents.

Figure 155. Metal shelves and folding tables with associated documentation.

Paper Records

Paper records include background and excavation materials, photo logs, and drawings. The paper records are in fair overall condition with contaminants including paper clips and binder clips.

Reports

Report records total 0.02 linear feet and are stored with the rest of the record collections.

Photographs

Photographs include color prints and negatives, and color slides. The slides are stored in archival quality holders.

Maps

Maps are stored flat in metal map cases or are rolled up. Both blue lines and drawings are present. Contaminants include paper clips, a metal binder clip, and rubber bands. The maps are in fair overall condition, with some maps showing evidence of water staining and having been rolled.

Audiovisual Records

There are two videotapes that occupy approximately 0.17 linear feet of space.

Computer Records

Computer related records include zip disks, tapes, and 3.5 inch floppy disks.

Collections Management Standards

The Archaeology Institute, University of West Florida, is a permanent curation repository and has an unwritten comprehensive curation plan.

Comments

1. The offices of the Archaeology Institute will be moving from Building 80 to a new campus building that is nearing completion. However, no collections will be stored in the new building.

2. There is no written curation plan for artifacts.

Recommendations

1. Artifacts require (a) cleaning, (b) sorting, (c) consistent direct labeling (when applicable), (d) placement in appropriately labeled archival primary and secondary containers, and (e) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of all maps in an archival, flat file case, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Human remains require segregation and proper storage. They should be examined by a qualified professional and steps to comply with the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et. seq.) should be taken.

4. Create a comprehensive curation policy.

149

T.T. Wentworth Jr. Florida State Museum

Pensacola, Florida

Repository Summary

Volume of Artifacts: 0.2 ft^3

Collection Origin: Pensacola Naval Air Station, Florida

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.02 linear feet

Collection Origin: Pensacola Naval Air Station, Florida

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date Of Visit: November 2 and 4, 1998

Person Contacted: Lynn Robertson, Museum Curator

The T.T. Wentworth Jr. Florida State Museum, is located in Pensacola, Florida, and is part of Historic Pensacola, Inc. The Wentworth Museum collects and preserves artifacts, buildings, and monuments, including items donated by members of the local community. Approximately 0.2 ft^3 of artifacts and 0.02 linear feet of Department of Defense (DoD) associated documentation from projects conducted on Pensacola Naval Air Station are at the museum. The artifacts are on loan from the University of West Florida.

Repository

The main collections repository is a multi-storied building with offices, exhibit space, laboratories, and storage areas (Figure 156). The building was constructed in 1907 and was originally used as Pensacola's City Hall. The foundation is brick with brick exterior walls. The roof is ceramic tile. The repository has space for analysis, conservation, artifacts, and exhibition.

Figure 156. Exterior of the museum building.

Collection Storage Areas

The bulk of artifacts from Pensacola Naval Air Station, are located in an exhibit case on the second floor of the museum (Figure 157). Three artifacts from Pensacola Naval Air Station are stored in the Conservation Laboratory, and are actively undergoing conservation treatments. The laboratory occupies a room in the southeast portion of the basement of the museum. The room measures approximately 450 ft^2 and has a brick floor overlaid with linoleum tile. Interior walls and ceiling are made of sheetrock. There are four windows. The room is used as a conservation laboratory for archaeological materials and serves as the office for the conservator. The room has central air conditioning and heating. Security includes an intrusion alarm, key lock, motion detectors, and window locks. There is a sprinkler system that is tied into the security office that then notifies the fire department.

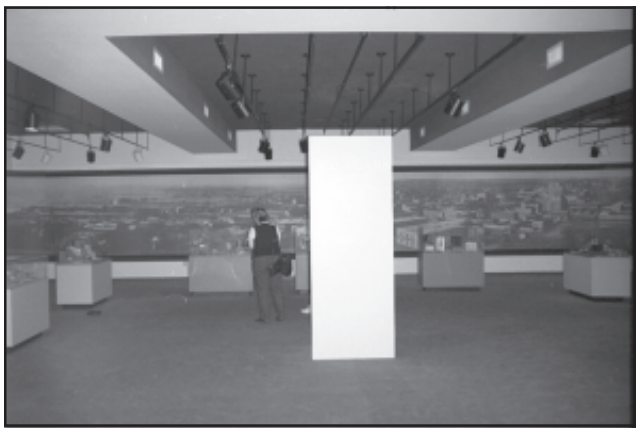

Figure 157. Artifacts on exhibit from NAS Pensacola.

Artifact Storage

There are a total of 29 artifacts on loan form the University of West Florida, Pensacola, The 29 artifacts would occupy approximately 0.2 ft^3 (Table 255). Three of the artifacts are located in the conservation laboratory and are actively undergoing conservation. Within the exhibit room the artifacts are store in an exhibit case that measures 24 x 24 x 4 (inches, d x w x h). Twenty-six artifacts are loosely placed in the case with one side facing up. The artifacts in the exhibit case are sorted by site number and material class, have been cleaned, and are directly labeled with a site number.

Table 255.
Percentage by Volume of DoD Artifacts Housed at the T.T. Wentworth Jr. Florida State Museum

Material class	NAS Pensacola
Lithics	3.5
Historic Ceramics	44.5
Prehistoric Ceramics	0.0
Fauna	0.0
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	16.5
Brick	0.0
Metal	30.0
Glass	5.5
Textile	0.0
Other	0.0
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated at the T.T. Wentworth Jr. Florida State Museum.

Records Storage

Records of the loan of the artifacts from the University of West Florida are contained in one folder and measure approximately 0.02 linear feet (Table 256). The folder is stored in a drawer of a four-drawer metal filing cabinet with other records on incoming loans.

Paper Records

The one manila folder only contains paper records. The records are all administrative and are in good condition.

Table 256.
Linear Footage of DoD Associated Documentation Housed at the T.T. Wentworth Jr. Florida State Museum

Materials	NAS Pensacola
Paper	0.02
Reports	0.00
Oversized*	0.00
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.02

* Includes maps and other oversized documents.

Collections Management Standards

The T.T. Wentworth Jr. Florida State Museum is a permanent curation repository and has a comprehensive curation plan that must be used by contractors interested in submitting collections. The plan encompasses permanent storage procedures for artifacts, documents, and photographs.

Comments

The artifacts in the exhibit case are arranged by site, whereas the records are contained in one manila folder. The artifacts are consistently labeled.

Recommendations

1. If the artifacts are removed from the exhibit case, they will require (a) placement in appropriately labeled archival primary and secondary containers and (b) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) creation of a finding aid, (c) creation of an archival duplicate copy of paper records, and (d) storage of archival paper copies in a separate, fire-safe, and secure location.

3. Create a formal agreement with Pensacola Naval Air Station to cover the artifacts on loan.

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Carolyn Rock

Woodbine, Georgia

Repository Summary

Volume of Artifacts: 23.02 ft^3

Collection Origin: Kings Bay Naval Submarine Base, Georgia

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 2.92 linear feet

Collection Origin: Kings Bay Naval Submarine Base, Georgia

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: April 23, 1999

Point of Contact: Carolyn Rock, Archaeologist

Carolyn Rock is an independent archaeologist who is no longer in business as a contractor. Originally, all archaeological materials collected by Ms. Rock went to the University of Florida Museum of Natural History, but they stopped excepting collections. Ms. Rock is seeking other repositories to accept the collections (Table 257) she presently is storing in her private residence.

Table 257.
Volume of DoD Archaeological Collections Housed by Carolyn Rock

Installation	Archaeological Materials (ft^3)	Records (linear feet)
NSB Kings Bay	23.02	2.92
Totals	23.02	2.92

Repository

The repository on Bunton Road is a single story private residence built in 1985. The exterior walls are wood siding and the foundation is concrete. The roof is shingled. The building has always been used as a residence.

Collections Storage Area

The collections storage area is the single stall attached garage with a concrete floor, sheetrock interior walls, and a plaster ceiling. There are four uncovered windows in the garage door that do not open. The garage encompasses 216 ft^2 and is used for storage of household items and lawn equipment. The garage storage is filled to approximately 75% capacity. The wood shelves holding archaeological collections are full with overstacked boxes. There are no environmental controls in the collections storage area, and no security measures are present except normal household measures such as locking doors. There are no fire protection devices and no program for pest management. There is no evidence

of infestation by rodents, insects, birds, or snakes. Ms. Rock's private residence is not a permanent repository.

Artifact Storage

Artifacts (Table 258) from the Kings Bay Naval Submarine Base are stored in nonarchival cardboard boxes of varying sizes and condition. Artifacts are placed in nested secondary twist-tie nonarchival plastic bags as well as loose in primary containers. Tertiary containers are film canisters, nonarchival boxes, a styrofoam cup, aluminum foil, coffee can, and plastic medicine vial. Some of the nonarchival boxes used as tertiary containers have plastic lids. The plastic bags have 3 x 5 cards and in some instances, flagging tape, as label inserts with label information of site number, provenience, date, and occasionally, material class, in marker or pen. Artifacts are cleaned and sorted according to provenience.

Table 258.
Percentage by Volume of DoD Artifacts Housed by Carolyn Rock

Material Class	NSB Kings Bay
Lithics	2.0
Historic Ceramics	7.9
Prehistoric Ceramics	27.5
Fauna	9.4
Shell	3.4
Botanical	1.0
Flotation	0.0
Soil	0.0
^{14}C	0.2
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.2
Brick	0.3
Metal	29.0
Glass	18.9
Textile	0.0
Other (buttons)	0.2
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated by Carolyn Rock.

Records Storage

Records from Kings Bay Naval Submarine Base total 2.92 linear feet (Table 259). All records are housed in the bedroom of Carolyn Rock's private residence. The documentation is on two shelves of a wood bookcase. No duplicate copies of the records have been produced.

Table 259.
Linear Footage of DoD Associated Documentation Housed by Carolyn Rock

Materials	NSB Kings Bay
Paper	1.25
Reports	0.83
Oversized*	0.00
Audiovisual	0.00
Photographic	0.83
Computer	0.00
Total	2.92

* Includes maps and other oversized documents.

Paper Records

Paper records encompass approximately 1.25 linear feet. Field material records are housed in ten various-sized plastic and cloth three-ring binders with metal clasps. Secondary containers are manila folders inside the binders. The containers are in fair condition with no contaminants noted. Labels are taped onto the binders or directly applied in marker and pen with inconsistent label information. Records are arranged by project and type, but no archival processing has been completed.

Reports

Reports are contained on one-half of one shelf.

Photographs

Photographs encompass approximately 0.83 linear feet within the folders inside the three-ring binders. The label information is the same as the paper records and no archival processing has been completed.

Collection Management Standards

Carolyn Rock's residence is not a permanent curation repository. Ms. Rock is temporarily storing archaeological collections from Kings Bay Submarine Base until a permanent facility can be found.

Comments

1. There are no environmental controls in the garage storage area.

2. There are no fire detection or suppression devices in the storage areas.

3. There is no security other than normal household door locks.

Recommendations

1. Unprocessed artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) creation of a finding aid, (c) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

3. Transfer artifacts once a permanent curation repository for long-term care of the DoD collections is designated.

Editor's Note

As of March 2000 collections from the King's Bay Naval Submarine Base have been returned to that installation for curation.

151

Southeastern Archeological Services

Athens, Georgia

Repository Summary

Volume of Artifacts: 30.76 ft³

Collection Origin: Fort Gordon, Georgia; Fort Bragg, North Carolina

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear feet of Records: 2.35 linear feet

Collection Origin: Fort Bragg, North Carolina

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: April 13-14, 1999

Point of Contact: Chad Braley, Co-owner and Senior Archeologist

Southeastern Archeological Services (SAS) serves as a temporary curation repository. Approximately 30.76 ft³ of archaeological materials and 2.35 linear feet of Department of Defense (DoD) associated documentation from projects conducted on Fort Gordon and Fort Bragg are housed at SAS (Table 260).

Table 260.
Volume of DoD Archaeological Collections Housed at Southeastern Archeological Services

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Fort Bragg	29.59	2.35
Fort Gordon	1.17	—
Totals	30.76	2.35

Repository

The main collections repository is a two-story structure that holds offices, laboratory, and storage areas (Figure 158). Originally built as a house in 1915, the structure has brick and steel-sided exterior walls (Figure 159). The repository has a concrete and brick foundation with a shingled roof. The structure has central air conditioning and forced-air heating

Figure 158. The back entrance exterior.

Figure 159. The front entrance exterior.

system. Outside doors have key locks and interior doors are open.

Collections Storage Area

The collections storage area is located on the first floor near the back entrance. Interior walls of the collections storage area are painted and wood paneled. Floors are carpeted, and the ceiling is plaster. There are two storm windows on the south wall of the collections storage area. Full venetian blinds cover approximately 75% of the windows. The windows are locked. The collections storage area is approximately 196 ft^2. The collections storage area is also used for artifact analysis, washing and drying, materials and supplies storage, and as a kitchen area for the office staff. This area houses only archaeological collections and is filled to approximately 75% capacity. One fire extinguisher without an inspection tag was noted in the collections storage area. The fire department inspects the structure once a year and it has passed each year. There is a pest management program to inspect for termites once a year. There were no signs of pest infestation in the collections storage area. Associated documentation is housed in an office across the hall from the collections storage area.

Artifact Storage

Artifacts are stored in nonarchival primary containers (Figure 160). Secondary containers consist primarily of paper bags with rubber bands around each one. Tertiary containers include plastic 2- and 4-mil zip-lock bags and paper bags. Tertiary paper bags also have rubber bands around each one.

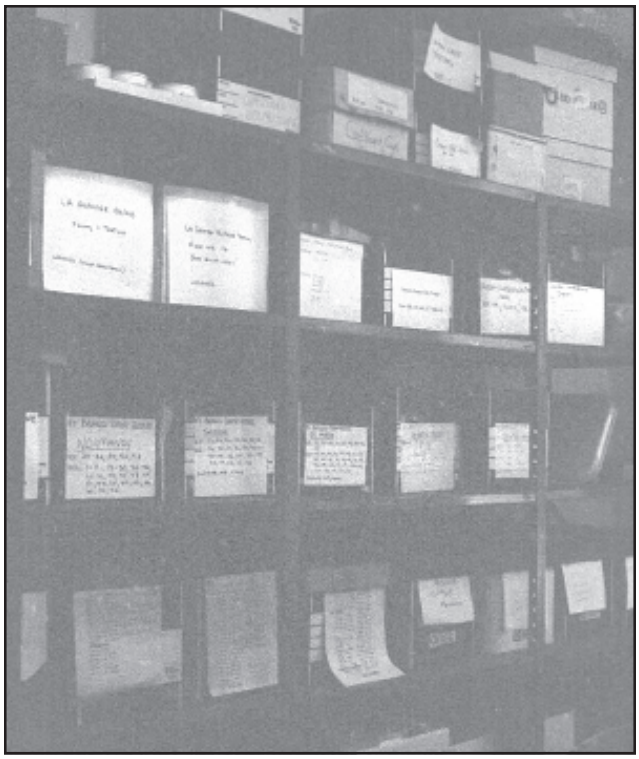

Figure 160. Examples of primary containers from the Fort Bragg Overhills Testing collections.

The majority of artifacts are cleaned, analyzed, and sorted by field specimen numbers or provenience. Plastic zip-lock bags are labeled with marker, and labels include site number, provenience, and material class, with an occasional artifact identified as to type. Artifacts encompass approximately 30.76 ft^3 (Table 261).

Table 261.
Percentage by Volume of DoD Artifacts Housed at Southeastern Archeological Services

Material Class	Fort Bragg	Fort Gordon
Lithics	82.2	2.3
Historic Ceramics	0.3	0.0
Prehistoric Ceramics	10.2	1.5
Fauna	0.1	0.0
Shell	0.0	0.0
Botanical	0.0	0.0
Flotation	0.0	0.0
Soil	0.0	0.0
^{14}C	0.0	0.0
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.0
Worked Bone	0.0	0.0
Brick	0.4	0.0
Metal	1.2	0.0
Glass	1.8	0.0
Textile	0.0	0.0
Other	0.0	0.0
Total	96.2	3.8

Human Skeletal Remains

No DoD human skeletal remains are curated at Southeastern Archaeological Services.

Records Storage

Records from Fort Bragg encompass approximately 2.35 linear feet (Table 262). Most of the records are stored within an office across the hall from the collections storage area. Records are housed in a file drawer in a metal desk, on a tabletop, and in a plastic file box on top of a table. Records of Fort Bragg were also found and removed from an archival box lid that housed records from an U.S. Army Corps of Engineers project.

Table 262.
Linear Footage of DoD Associated Documentation Housed at Southeastern Archeological Services

Materials	Fort Bragg
Paper	2.15
Reports	0.00
Oversized*	0.13
Audiovisual	0.00
Photographic	0.08
Computer	0.00
Total	2.35

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 2.15 linear feet. No contaminants were noted and the records appear to be in fair condition. Some of the records are arranged by area and form types. No copies have been made and records are not in archival primary containers.

Maps

Maps comprise approximately 0.13 linear feet. They are separated from paper records in a molded plastic file box. No contaminants were noted and no copies have been made.

Photographs

Photographs comprise approximately 0.08 linear feet. The photographs are loose in manila folders and consist of color photographs, black-and-white photographs, negatives, and contact sheets. The photographs are housed in the same manila folders as paper records.

Collection Management Standards

Southeastern Archeological Services is not a permanent curation facility and does not have a curation plan. The collection from Fort Bragg will be returned to Fort Bragg for permanent curation. Materials from Fort Gordon will be placed in permanent repository when designated by the sponsor.

Comments

Fire extinguisher in collections storage area has no inspection label.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) placement of maps in an archival, flat file case, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Inspect fire extinguishers in repository.

Editor's Note

As of March 2000 collections from Fort Bragg have been prepared for proper curation. Fort Gordon material will also be prepared as soon as the analysis is complete.

152

TRC Garrow and Associates

Atlanta, Georgia

Repository Summary

Volume of Artifacts: 46.34 ft^3

Collection Origin: Fort McPherson, Georgia; Fort Stewart, Georgia; Robins Air Force Base, Georgia; Beaufort Naval Hospital, South Carolina; Grubbs/Kyle Army National Guard Training Center, Tennessee

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.57 linear feet

Collection Origin: Fort McPherson, Georgia; Fort Stewart, Georgia; Robins Air Force Base, Georgia; Beaufort Naval Hospital, South Carolina; Grubbs/Kyle Army National Guard Training Center, Tennessee

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: April 12, 1999

Point of Contact: Thomas Garrow, President

TRC Garrow and Associates is part of an environmental firm that conducts various environmental compliance projects, including archaeological work. The firm does not act as a permanent repository. In 1997, the St. Louis District visited TRC Garrow and Associates while conducting assessments on U.S. Fish and Wildlife collections (Marino and Wilzbach 1998) and conducted a full evaluation of the repository. Therefore, the 1999 Department of Defense (DoD) assessment team confirmed that no major changes had been made, and the data regarding the repository below is taken from Marino and Wilzbach 1998. The DoD team obtained specifically all information regarding the DoD collections in 1999. Currently, TRC Garrow and Associates has archaeological collections from five DoD installations (Table 263).

Repository

TRC Garrow and Associates occupies a 1983 building encompassing 9,293 ft^2 that has a concrete foundation and steel frame (Figure 161). Exterior

Table 263.
Volume of DoD Archaeological Collections Housed at TRC Garrow and Associates

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Beaufort Naval Hospital	1.08	0.15
Fort McPherson	1.08	0.19
Fort Stewart	43.04	0.21
Grubbs/Kyle Training Center	1.08	0.02
Robins Air Force Base	0.06	—
Totals	46.34	0.57

Figure 161. The exterior and entrance to TRC Garrow and Associates.

walls are constructed of brick, and the built-up asphalt roof is original. Interior walls are plaster, and the floors are carpeted concrete. Ceilings in the repository are suspended acoustical tile. The majority of space is used for report preparation, analysis, and offices. There is a materials/supply storage area, a small kitchen area, study areas, and areas for artifact washing, holding, and storage.

Collections Storage Area

The collections storage area is constructed identically to the rest of the repository. The collection area comprises storage space and space for processing. All lighting in the area is nonfiltered fluorescent. Central air-conditioning provides for temperature stabilization. A professional pest management company services the repository annually. The one time problem of terminates was mitigated and no additional problems have occurred The repository has an intrusion alarm wired into the police department and has motion detectors located throughout the building. The exterior doors are secured with dead bolts, and interior doors are of solid wood with key locks. Access to the various areas is restricted to pertinent personnel. The repository is equipped with a fire alarm wired into the fire department. Smoke detectors are located throughout the repository. In addition, a two-hour firewall separates the offices and collection area.

Artifact Storage

Artifact storage (Table 264) varies according to the installation. The Fort Stewart collections were processed differently than the other material. All other collection boxes are labeled with a piece of taped paper indicating project, accession number, and contents. These boxes are acidic and have folded flaps for security. Objects are generally in 2-mil zip-

Table 264.
Percentage by Volume of DoD Artifacts Housed at TRC Garrow and Associates

Material Class	Beaufort Naval Hospital	Fort McPherson	Fort Stewart	Grubbs/Kyle Training Center	Robins AFB
Lithics	0.0	0.0	14.4	0.3	0.2
Historic Ceramics	0.6	1.7	32.4	0.5	0.0
Prehistoric Ceramics	0.7	0.0	11.0	0.0	0.0
Fauna	0.0	0.0	0.0	0.0	0.0
Shell	0.0	0.0	0.0	0.1	0.0
Botanical	0.0	0.0	0.0	0.0	0.0
Flotation	0.0	0.0	0.0	0.0	0.0
Soil	0.0	0.0	0.0	0.0	0.0
^{14}C	0.0	0.0	0.2	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	1.6	0.0	0.0
Brick	0.1	0.1	10.1	0.9	0.0
Metal	0.3	0.2	13.9	0.3	0.0
Glass	0.7	0.3	7.7	0.3	0.0
Textile	0.0	0.0	0.0	0.0	0.0
Other (leather and slag)	0.0	0.0	1.4	0.0	0.0
Total	2.4	2.3	92.7	2.4	0.2

lock bags or paper bags secured with rubber bands. These are directly labeled, generally with site, provenience, and project. One collection is located within a paper bag loose on the shelf. These collections are clean and about 70% are directly labeled. The Fort Stewart boxes are acid-free and measure 13.5 x 12.75 x 11.25 (inches, d x w x h). These are labeled with inserts of acid-free paper that were computer generated. They recorded the contractor, accession number, project, and box number. Secondary containers consist of nested 4-mil plastic, zip-lock bags directly labeled with site number, provenience, project, date, box and bag number, and investigator. Additionally, acid-free paper inserts provided additional information. All material is clean, sorted by provenience, and directly labeled with site number. A few boxes of Fort Stewart material were still being processed during the visit, but they are to be stored as the other collections.

Human Skeletal Remains

No DoD human skeletal remains are curated at TRC Garrow and Associates.

Records Storage

Approximately 0.57 linear feet of associated documentation is housed at TRC Garrow and Associates (Table 265). All documentation except the Fort Stewart material is stored within boxes that are both archival and nonarchival, generally with the artifacts. This material consists of paper records and photographic records that are stored within manila folders, original photographic envelopes, plastic bags, or negative sheets. The Fort Stewart material consists of the original and a duplicate copy of analysis records in a manila envelope. No finding aids are available for any of the documentation.

Paper Records

The paper records comprise approximately half of the records. This includes survey and analysis records. Overall the condition of the paper records is good.

Photographs

Photographs consist of black/white prints, negatives, and slides. Only the negatives are in the appropriate negative sleeves.

Collections Management Standards

TRC Garrow and Associates is an archaeological contracting firm and is not a long-term curation repository. They do not possess a comprehensive curation plan as they only process artifacts for analysis purposes. However, material is processed according to the sponsoring agencies guidelines as indicated in the contracts.

Comments

1. Collections storage varies according to installation.

2. Repository meets most federal requirements.

Recommendations

1. Except for the Fort Stewart material, artifacts require (a) direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

Table 265.
Linear Footage of DoD Associated Documentation Housed at TRC Garrow and Associates

Materials	Beaufort Naval Hospital	Fort McPherson	Fort Stewart	Grubbs/Kyle Training Center
Paper	0.08	0.02	0.21	0.02
Reports	0.00	0.00	0.00	0.00
Oversized*	0.00	0.00	0.00	0.00
Audiovisual	0.00	0.00	0.00	0.00
Photographic	0.06	0.17	0.00	0.00
Computer	0.00	0.00	0.00	0.00
Total	0.15	0.19	0.21	0.02

* Includes maps and other oversized documents.

2. Records require (a) separation from the artifact collection containers, (b) removal of all contaminants, (c) packaging in appropriately labeled archival primary and secondary containers, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Identify a permanent repository (ies) for the transfer of the DoD archaeological collections.

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University of Georgia

Riverbend Research Laboratory and Museum of Natural History Athens, Georgia

Repository Summary

Volume of Artifacts: 92.89 ft³

Collection Origin: Fort Gordon, Georgia; Fort Stewart, Georgia; Kings Bay Naval Submarine Base, Georgia; and Parris Island Marine Corps Recruit Depot, South Carolina.

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 3.54 linear feet

Collection Origin: Fort Gordon, Georgia

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: April 14-16, 1999

Points of Contact: Dr. David Hally, Curator; Dr. Mark Williams, Assistant Curator, and Dr. Elizabeth Reitz, Director Museum of Natural History

The University of Georgia Riverbend Research Laboratory and Museum of Natural History are located in Athens, Georgia. The Riverbend Research Laboratory serves as a permanent curation repository. The Museum of Natural History serves as a temporary curation repository. Approximately 63.79 ft³ and 3.54 linear feet of Department of Defense (DoD) archaeological collections and associated documentation from projects conducted at Fort Gordon, Fort Stewart, and Kings Bay Naval Submarine Base, are curated in the Riverbend Research Laboratory. There are approximately 29.1 ft³ of DoD archaeological collections from projects conducted at Parris Island Marine Corps Recruit Depot temporarily curated at the Museum of Natural History (Table 266).

Repository

A building evaluation was conducted for the Riverbend Research Laboratory in 1993 for another St. Louis District project (Bade and Lueck 1994). No significant changes have been made to the repository since that time, and therefore, the 1999 team did not reevaluate the building. Information on the Riverbend Research Laboratory is taken from the

Table 266.
Volume of DoD Archaeological Collections Housed at the University of Georgia

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Fort Gordon	60.44	3.54
Fort Stewart	2.23	—
NSB Kings Bay	1.12	—
Parris Island Marine Corps Recruiting Depot	29.10	—
Totals	92.89	3.54

earlier project. Riverbend is a two-level research center built in 1974 housing offices, classrooms, and laboratories for geography, chemistry, genetics, and archaeology (Figure 162). The Laboratory of Archaeological Curation is located on the lower level. All archaeological collections are in the collections storage area on the lower level.

Figure 162. The exterior of the Riverbend Research Laboratory.

The 1999 assessment team evaluated the Museum of Natural History building. It was originally used as a physical plant for the repair of University trucks. It is unknown when the structure was constructed, but was remodeled for the museum in the mid-1980s. The structure has a concrete foundation, concrete block and brick exterior walls, a flat composition roof, and houses a collections storage area/laboratory, museum, and offices (Figure 163).

Collections Storage Areas

The artifact collections at Riverbend Research Laboratory are housed in one area and the records are stored in an adjacent room. The storage units in the collections storage area are metal space-saver units that include 24 rows. The last row is attached to interior concrete walls. The floor of the storage collections area is concrete. Security consists of an intrusion alarm wired to campus police, motion detectors, controlled access and key locks. There is a fire suppression system and detection system in place. A private company provides pest management on an as-needed basis.

Figure 163. The exterior and entrance of the Museum of Natural History.

The Museum of Natural History is a temporary repository for analyzing faunal material from the Parris Island Marine Corps Recruit Depot. The materials will be sent to the South Carolina Institute of Archaeology and Anthropology upon completion of analysis. In the collections storage area/laboratory of the Museum of Natural History, the floor is tile and the interior walls are concrete block and brick. The room has a metal ceiling, and two windows along the south exterior wall. The windows do not open and are covered with blinds. There is approximately 832 ft^2. of space. The room is used for a temporary zoological study room and storage area. Zoological storage units fill approximately fifty 50% of the room, and the area is filled to approximately seventy-five 75% capacity. Storage units consist of wood cabinets with wooden sliding drawers. There is central air-conditioning and forced-air heat. Access is through a key-lock door and five or six zoological personnel have keys to the storage area. There is a manual fire alarm outside the door of the storage area and fire extinguishers, which were inspected in 1996. Fire alarms are not wired into the fire department. There is a Hallo system in other sections of the building behind fire doors. There is no program for pest management. When pests are noted the problem is immediately mitigated. There were no signs of pests in the collections storage area during the visit. There are no records stored at the Museum of Natural History.

Table 267.
Percentage by Volume of DoD Artifacts Housed at the University of Georgia

Material Class	Fort Gordon	Fort Fort Stewart	NSB Kings Bay	Parris Island Marine Corps Recruiting Depot
Lithics	29.9	0.0	0.0	0.0
Historic Ceramics	8.4	1.1	0.0	0.0
Prehistoric Ceramics	6.8	1.2	1.2	0.0
Fauna	0.3	0.0	0.0	31.2
Shell	0.0	0.0	0.0	0.0
Botanical	0.0	0.0	0.0	0.0
Flotation	0.0	0.0	0.0	0.0
Soil	0.0	0.0	0.0	0.0
^{14}C	0.6	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0
Worked Shell	0.1	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0
Brick	1.2	0.0	0.0	0.0
Metal	6.8	0.0	0.0	0.0
Glass	11.1	0.1	0.0	0.0
Textile	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0
Total	65.2	2.4	1.2	31.2

Artifact Storage

Artifacts from Fort Gordon, Fort Stewart, and Kings Bay Naval Submarine Base at the Riverbend Research Laboratory encompass approximately 63.79 ft³ (Table 267). They are stored in acidic cardboard boxes with telescoping lids. The majority of the boxes are overpacked and several are compressed and/or torn. Some of the boxes have inventory lists on white legal-sized paper and lot control sheets. Some boxes also contain associated documentation. Secondary containers include paper bags and 2- and 4-mil zip-lock plastic bags. Other secondary containers include green nonarchival plastic bags. Tertiary containers include plastic sandwich bags, paper bags, and paper towels. The majority of the secondary and tertiary paper bags are secured by rubber bands. One of the glass artifacts has rubber bands around it for reconstruction purposes. Approximately 95% of the artifacts have been cleaned, some poorly, and most are sorted according to provenience. Acidic paper labels with black ink contain site number, provenience, date, initials, and bag number. Some of the labels are stapled to secondary containers, or in one instance, stuck to a glass artifact. A small percentage of lithics and ceramics have been directly labeled.

Faunal material encompassing approximately 29.1 ft³ are housed at the Museum of Natural History (Table 267). It is stored in small nonarchival cardboard boxes of various sizes without lids in wood drawers. The drawers have a taped label with site number, contents, and the extent of analysis. There are no labels on the secondary boxes. Tertiary containers consist of 3-mil zip-lock plastic bags. The bags are labeled with provenience and a nonarchival paper label with provenience and taxonomic information is placed inside each plastic bag. The historic faunal material has been cleaned and sorted by provenience, but not directly labeled

Human Skeletal Remains

No DoD human skeletal remains are curated at the University of Georgia.

Records Storage

Records from Fort Gordon are located in two artifact boxes within the collections storage area of the Riverbend Research Laboratory (Table 268), and consist of field notes, photo logs, bag lists, laboratory forms, analysis forms, box inventory, negatives, contact sheets, slides, maps, and other paper records. The remaining records are located in acidic boxes on top of metal file cabinets in the adjacent records room. One of the boxes is unlabeled. The associated documentation is in acid-

Table 268.
Linear Footage of DoD Associated Documentation Housed at The University of Georgia

Materials	Fort Gordon
Paper	2.98
Reports	0.29
Oversized*	0.06
Audiovisual	0.00
Photographic	0.21
Computer	0.00
Total	3.54

* Includes maps and other oversized documents.

free file folders and in nonarchival hanging folders. The documentation is arranged according to type of documents. There is no associated documentation at the Museum of Natural History.

Paper Records

Paper records comprise approximately 2.98 linear feet. They are arranged by type of document and do not have contaminants. The records in the artifact boxes appear to be in fair condition, while those in the records room are in good condition.

Reports

Reports comprise about 0.29 linear feet of the collections.

Maps

Maps comprise approximately 0.06 linear feet. They are in with the artifacts in nonarchival manila folders. No contaminants were noted.

Photographs

Photographs comprise approximately 0.21 linear feet. There are no contaminants, however, they are not in archival sleeves. Some are in archival manila folders with paper records. Photographs and negatives that are in the artifact boxes are in their original envelopes. Some of the photographs used in a report are pasted onto paper.

Collection Management Standards

No written curation policy for archaeological collections has been implemented at the Riverbend Research Laboratory or the Museum of Natural History.

Comments

1. All artifacts at the Riverbend Research Laboratory are stored in acidic boxes, nonarchival paper bags, and assorted secondary and tertiary containers.

2. There is no program of pest management at the Museum of Natural History.

3. A manual fire alarm is located outside the door of the collections storage area of the Museum of Natural History, and is not connected to the fire department. Fire extinguishers in the Museum of Natural History were last inspected in 1996.

Recommendations

1. Artifacts require (a) proper cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of maps in an archival, flat file case, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Create a comprehensive curation policy.

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Illinois State Museum

Springfield, Illinois

Repository Summary

Volume of Artifacts: 60.01 ft^3

Collection Origin: Camp Lincoln, Illinois; Joliet Army Ammunition Plant, Illinois; Marseilles Training Center, Illinois; Savanna Army Depot Activity, Illinois

Compliance Status: Artifacts require complete rehabilitation to comply with federal guidelines and standards for collections.

Linear Feet of Records: 10.16 linear feet

Collection Origin: Camp Lincoln, Illinois; Joliet Army Ammunition Plant, Illinois; Marseilles Training Center, Illinois; Savanna Army Depot Activity, Illinois; Fort Leonard Wood, Missouri

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: May 17, 1999

Points of Contact: Dr. Michael Wiant, Curator of Anthropology; Dr. Terry Martin Associate Curator of Anthropology

The Illinois State Museum Collection and Research Center is located in Springfield, Illinois, and serves as the main archaeological repository for collections from Illinois. The repository has Department of Defense (DoD) archaeological collections from Camp Lincoln, Fort Leonard Wood, Joliet Army Ammunition Plant, Marseilles Training Center, and Savanna Army Depot Activity, consisting of approximately 60 ft^3 of archaeological materials and 10.16 linear feet of associated documentation (Table 269).

Table 269.
Volume of DoD Archaeological Collections Housed at the Illinois State Museum

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Camp Lincoln	52.96	2.7
Fort Leonard Wood	—	4.96
Joliet Army Ammunition Plant	5.09	0.71
Marseilles Training Area	—	0.83
Savanna Army Depot Activity	1.96	0.96
Totals	60.01	10.16

Repository

The Illinois State Museum (Research and Collection Center) (ISM-RCC) was originally built in 1920 as a single story manufacturing plant (Figure 164). The latest renovations occurred prior to ISM-RCC moving into the building in1986 when the existing brick building with wood roof decking was expanded. The expansion included construction of a single-story steel frame addition with masonry

Figure 164. The main entrance.

exterior walls, concrete floor, and wooden roof decking with EPDM. In addition, major interior changes occurred, such as constructing office and laboratory spaces around a central collections storage room. The site has a chain-link fence on three sides and shares a common fence with a state-managed (Office of Property Control) auto lot on the fourth side. The only public access to the site is at the west or front of the facility. Security measures include intrusion alarms at all exterior openings. The system is wired to and monitored by a private security company. The same company responds to the fire alarms. Only museum administrators, the building manager, and curation staff members has a card key to access the collections storage room. Motion detectors are installed at all doors inside the collections storage room. Fire protection consists of fire exits and illuminated exit signs at each exist. Interior traffic circulation is designed to move people, in the event of a fire, down hallways that end at a fire exit. Except for office doors, fire-rated doors close off each office space. Both auto and manual fire alarms exist throughout the building. Heat and smoke sensors are in place. Fire extinguishers (Type A, B, and C) are also located throughout the building. A sprinkler system is present in portions of the building, such as the openings that connect two spaces. However, the system does not extend to all areas of the building, including the collections storage room. Environmental measures include a centralized heating, ventilation, and air conditioning (HVAC) system. The system is checked and maintained by building engineers (themselves state employees) who also replace the air filters when necessary.

Collections Storage Area

The storage area is approximately 20,000 ft^2 and contains over 7.5 million accessioned artifacts from over 2,000 archaeological sites. The central HVAC controls heating, cooling, and humidity levels in the storage room. Digital climate readers monitor environmental conditions. If temperature or humidity varies beyond levels determined by the collections management staff an alarm goes off. Fluorescent lights have no filters for ultraviolet light. Sticky traps are used to capture pests.

Artifact Storage

Labeled, open, nonmovable, metal, shelving units 15 x 36 x 96 (inches, d x w x h) contain archival boxes 16 x 11 x 10 (inches, d x w x h), with artifacts. The boxes have adhesive labels that contain either typed information or a computer printout of a box's contents. Some of the boxes are overpacked. Some of the boxes contain inventory and box identification sheets. The labeling is consistent. Artifacts in the boxes are contained in zip-lock plastic bags (2- or 4-mil). Nesting occurs with plastic vials and smaller plastic bags. Secondary container labels are directly written in pen or marker with the site number, provenience, project, date, catalog number, contents, or material (Figure 165). All the artifacts have been cleaned. When artifacts are labeled, the

Figure 165. Prehistoric ceramics from Savanna Proving Ground.

Table 270.
Percentage by Volume of DoD Artifacts Housed at the Illinois State Museum

Material Class	Camp Lincoln (ILARNG)	Joliet Army Ammunition Plant	Marseilles Training Area (ILARNG)	Savanna Army Depot
Lithics	29.5	1.1	3.3	0.1
Historic Ceramics	0.0	0.0	0.6	0.3
Prehistoric Ceramics	12.6	0.0	0.0	1.6
Fauna	12.6	0.4	0.0	0.0
Shell	0.0	0.0	0.0	0.0
Botanical	5.0	0.0	0.0	0.0
Flotation	3.4	0.0	0.0	0.0
Soil	20.2	6.5	0.0	0.0
^{14}C	0.0	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0
Brick	0.0	0.0	0.0	0.4
Metal	0.0	0.1	0.0	0.4
Glass	0.0	0.0	0.7	0.4
Textile	0.0	0.0	0.0	0.0
Other (daub)	0.8	0.0	0.0	0.0
Total	84.1	8.1	4.6	3.2

labels are direct and written in pen over white out. The artifacts (Table 270) are sorted by provenience or material.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Illinois State Museum

Records Storage

The record collection comes from archaeological projects on Camp Lincoln, Fort Leonard Wood, and Savanna Army Depot Activity (Table 271). Storage units consist of various size metal file cabinets (e.g. 28.25 x 18.25 x 57 inches, d x w x h) or nonmovable metal shelves 15 x 26 x 95 (inches, d x w x h). Drawers that measure 27.5 x 17 x 10.75 (inches, d x w x h) have a paper tag in a metal holder where the tag is directly labeled in marker or pen, or the drawer is directly labeled in marker with no paper tag. The shelves contain boxes of records (Figure 166). When a large quantity of records from an accession accumulate, the records themselves are placed in a box and the box is placed on a shelf. The accession records only are placed in the file cabinet. Secondary containers consist of accordion folders, manila folders, manila folders inside of an accordion folder, acid-free folders, metal tabbed report covers, and plastic slide boxes. Labels are adhesive with information written in pen or is typed, or direct, written in pen. Label information is consistent. The

Table 271.
Linear Footage of DoD Associated Documentation Housed at the Illinois State Museum

Materials	Camp Lincoln (ILARNG)	Fort Leonard Wood	Joliet Army Ammunition Plant	Marseilles Training Area (ILARNG)	Savanna Army Depot (ILARNG)
Paper	0.98	3.79	0.46	0.75	0.89
Reports	1.10	0.85	0.00	0.08	0.06
Oversized*	0.04	0.04	0.25	0.00	0.01
Audiovisual	0.00	0.00	0.00	0.00	0.00
Photographic	0.57	0.21	0.00	0.00	0.00
Computer	0.00	0.06	0.00	0.00	0.00
Total	2.70	4.96	0.71	0.83	0.96

* Includes maps and other oversized documents.

Figure 166. Example of primary containers and how those containers are stored.

records are in good to excellent condition. A duplicate copy of the records does exist and is located in a separate building.

Paper Records

Paper records comprise approximately 6.87 linear feet and consist of administrative, background, survey, excavation, and analysis information. Contaminants, such as paper clips, rubber bands, and binder clips, were noted in some of the paper records.

Reports

Reports measure approximately 2.09 linear feet.

Photographs

Photographs measure approximately 0.78 linear feet. Photographic records include black-and-white prints and negatives, black-and-white contact sheets, color slides, color prints, and photograph logs.

Maps

Maps and drawings measure approximately 0.34 linear feet and are included in the paper records.

Computer

Computer disks holding data from archaeological investigations comprise approximately 0.06 linear feet of the collection.

Collections Management Standards

The Illinois State Museum Research and Collection Center is a permanent curation repository and has many collection management policies including a comprehensive plan for curation.

Comments

Camp Lincoln, Joliet Army Ammunition Plant, and the Marseilles Training Area, are Illinois Army National Guard facilities. The Savanna Army Depot Activity is scheduled to close in 2001 as part of the Base Realignment and Closure actions passed by Congress in 1995.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in secondary containers.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled primary and secondary archival containers, (c) placement of maps in an archival flat file, and (d) creation of a finding aid.

3. Reduce overpacking of artifacts by increasing box count.

Editor's Note

As of March 2000 ISM staff have identified additional collections belonging to the Illinois National Guard.

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U.S. Army Corps of Engineers Construction Engineering and Research Laboratory

Champaign, Illinois

Repository Summary

Volume of Artifacts: 81.63 ft^3

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 5.92 linear feet

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: 1.04 ft^3

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Compliance for the Native American Graves Protection and Repatriation Act should be addressed.

Assessment

Date of Visit: May 19, 1999

Point of Contact: Suzanna Walaszek, Archaeologist/ Curation Specialist

The U.S. Army Corps of Engineers Construction Engineering and Research Laboratory (CERL) is located in Champaign, Illinois. The repository temporarily has archaeological collections from Fort Leonard Wood consisting of approximately 81.63 ft^3 of archaeological materials, 1.04 ft^3 of human remains, and 5.92 linear feet of associated documentation.

Repositories

At CERL collections are located in two rooms inside an office and laboratory building. The building was constructed in 1970s, with additions constructed in the 1980s (Figure 167). The building has a concrete foundation with brick exterior walls. The roof is made of built-up asphalt and gravel. The collections storage areas, the analysis laboratory and Room 1180, are described below.

Figure 167. The front entrance.

Collection Storage Areas

In the analysis laboratory, the floor has carpet over metal and interior walls that are made from sheetrock and concrete block. There is a suspended acoustical tile ceiling and no windows. The room is at 100% capacity. Activities in the room include serving as temporary artifact storage, records storage, and offices. Security measures include a key lock, combination lock, controlled access for visitors, and escorted access for nonfederal employees within the building. Environmental controls consist of central air conditioning and heat. Fire protection consists of fire alarms wired to the fire department and fire extinguishers. Monthly inspection of traps is an integral part of the pest management program.

The second storage area, Room 1180, is accessed only through the analysis laboratory. The construction, security, environmental controls, and pest management program is identical to the analysis laboratory. Smoke detectors provide additional fire protection within Room 1180. The room is at 50% capacity. Activities in the room include temporary artifact storage (Figure 168), records storage, and materials/supplies storage. Artifacts and records are stored in both collections storage areas.

Figure 168. Collections from Fort Leonard Wood, Missouri.

Artifact Storage

Two types of shelving units hold the collections: unlabeled, open, nonmovable, metal shelving units of various size and a space saver storage unit. Artifact are directly on these units or contained acidic and archival boxes of various sizes (e.g. 18.5 x 13.5 x 7.5 inches, d x w x h), and plastic bins. Box labeling consists of direct marker or pen, a piece of paper taped to the outside, or an adhesive sleeve with a computer generated paper insert. Label information is inconsistent. Some of the boxes are torn, have water damage, or are overpacked. Artifacts in the boxes are loose or are contained in zip-lock plastic bags (2- or 4-mil), archival boxes, paper bags with a folded or rubber banded top, or nonarchival cardboard boxes. Secondary container labels are directly written in pen or marker with the field number, provenience, date, investigator, material, or project. Some marker information is beginning to smear. Within the secondary containers, nested containers consist of plastic zip-lock or twist-tie bags, aluminum foil, plastic capsules, or plastic medicine canisters. Most of the artifacts have been cleaned and most are labeled. Labels are direct and written in pen. In addition, acid-free inserts in pen, pencil, or computer generated labels have been inserted into the containers. The artifacts (Table 272) are grouped by provenience, material class, or project.

Table 272.
Percentage by Volume of DoD Artifacts Housed at the Construction Engineering and Research Laboratory

Material Class	Fort Leonard Wood
Lithics	30.4
Historic Ceramics	1.6
Prehistoric Ceramics	1.3
Fauna	12.9
Shell	8.0
Botanical	8.6
Flotation	15.7
Soil	9.6
^{14}C	1.4
Human Skeletal	1.1
Worked Shell	0.6
Worked Bone	0.0
Brick	1.4
Metal	2.5
Glass	3.7
Textile	0.1
Other (charcoal, plastic, ochre, eggshell, and leather)	1.1
Total	100.0

Human Remains

Human remains are present from six sites on Fort Leonard Wood: 23PU58 (Big Freeman Cave), 23PU209 (Salt Peter Cave), 23PU210 (Joy Cave), 23PU211 (Davis Cave #1), 23PU264, 23PU565 (Little Freeman Cave), and 23PU719 (Table 307). The remains consist of cranial, dental, upper and lower limb, and torso fragments. Both adult and infant bone is present. The bone is in good condition and is contained in plastic bags. Labels on the bags are written directly in pen or the bags have paper inserts that are written on in pen.

Records Storage

Records (Table 273), are located on storage units consisting of unlabeled, nonmovable, metal shelves of various sizes (e.g. 17.75 x 35 x 73 inches, d x w x h). Nonarchival boxes of various size (e.g. 10.25 x 15.5 x 12.5 inches, h x d x w) or archival boxes (10 x 15.5 x 10.5 inches, h x d x w) contain records. Labels vary and are written on paper taped to the outside of the box, are adhesive with typed or computer generated information, or directly written in marker or pen. Label information is inconsistent. Secondary containers consist of plastic three-ring binders, manila envelopes, a cardboard box, accordion folders, and acid-free files. Labels, when present, are direct pen labeling, taped pieces of paper, adhesive, or adhesive with a paper insert. Label information is inconsistent. The records are in fair to good condition. A duplicate copy of the records does not exist. Records are occasionally stored in the same box as artifacts.

Table 273.
Linear Footage of DoD Associated Documentation Housed at the CERL

Materials	Fort Leonard Wood
Paper	3.65
Reports	1.60
Oversized*	0.10
Audiovisual	0.00
Photographic	0.56
Computer	0.00
Total	5.92

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 3.65 linear feet and consist of administrative, background, survey, and analysis information.

Reports

Reports measure approximately 1.6 linear feet.

Maps

Maps and drawings measure approximately 0.1 linear feet.

Photographs

Photographs measure 0.56 linear feet. Photographic records include black-and-white negatives, contact sheets, color slides, and photo logs.

Computer Records

Computer disks with data from archaeological projects measure approximately 0.25 linear feet.

Collections Management Standards

CERL is a temporary curation repository, however, they do have standards for the acceptance of contractor submitted collections. These standards are incorporated into contracts. Contractors send collections to CERL, whose staff then determines if the collections have been prepared to federal curation standards. If they have, CERL forwards the collections to a permanent curation repository.

Comments

We were asked by Suzanna Walaszek not to examine one box of records from Fort Riley, Kansas, from an on-gong project at the installation.

Recommendations

1. Artifacts require (a) cleaning if necessary, (b) consistent direct labeling (when applicable), (c) bagging in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, and (d) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

3. A permanent curation repository should be identified for the transfer and long-term care of the DoD collections.

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University of Illinois

Public Service Archaeology Program
Urbana, Illinois

Repository Summary

Volume of Artifacts: 1.17 ft^3

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.48 linear feet

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: May 18, 1999

Point of Contact: Jacqueline McDowell, Laboratory Manager

The Public Service Archaeology Program (PSAP) at the University of Illinois, Urbana-Champaign conducts research and cultural resource management projects for federal and state agencies as well as private organizations. PSAP is located at the University of Illinois and is sponsored by the Department of Anthropology. PSAP's mission is to provide teaching, research, and public service in archaeology to the citizens of Illinois. PSAP houses 1.17 ft^3 of artifacts and 0.48 linear feet of records Fort Leonard Wood (Figure 169).

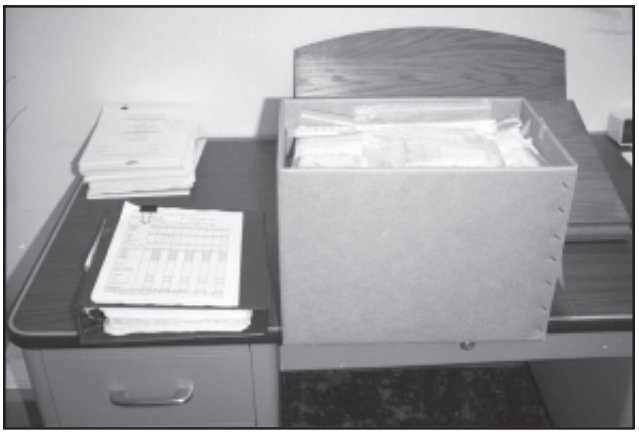

Figure 169. The Fort Leonard Wood artifact and documentation colletions at Public Service Archaeology Program.

Repository

Since 1990, PSAP has occupied the Horticultural Field Laboratory, which was constructed in 1921 to provide space for horticultural research (Figure 170). The repository has a concrete foundation and brick exterior walls. The roof is slate tile. The entire building is now used as storage, offices, and laboratories for archives and archaeology.

Figure 170. The front entrance to the building with the Public Service Archaeology Program.

Collections Storage Areas

Artifacts and records are stored in two different areas in the Horticultural Field Laboratory. The artifact curation room (Figure 171) has a concrete floor and a plaster ceiling. The interior walls are made of plaster over concrete blocks. There are no windows in the curation room. The total square footage is 88 ft^2. There are no environmental controls in the curation area, however, there is a wall air conditioning in the laboratory connected to the collections area. Security measures for the collections area include an intrusion alarm, a key lock, and controlled access. Campus security patrols the grounds, the doors are locked on evenings and weekends, four individuals have keys to the front door of the building, and four other individuals have keys to the lab.

Figure 171. Artifact storage room formerly build as a safe to store horticultural specimens.

Fort Leonard Wood records are stored in a laboratory. The floor is concrete, the interior walls are concrete block with plaster overlay, and the ceiling is plaster. There are no windows, but there is a wall unit air conditioning and forced-air steam heat, as well as individual radiators.

Artifacts Storage

Fort Leonard Wood collections (Table 274) are in one acid-free cardboard box. It has a removable lid and measures 16 x 10.5 x 12 (inches, d x w x h). The box is labeled with an 8.5” x 11” sheet of paper taped to the front. The computer-printed label has the project name and number. Inside the box, artifacts are double bagged in 4-mil plastic bags. The secondary bags are labeled directly in pen with the site number, provenience, and material class. All material is cleaned and sorted by provenience and material type. When applicable, artifacts are labeled directly in pen. Acid-free paper inserts have been placed in the bags. These computer-generated inserts

Table 274.
Percentage by Volume of DoD Artifacts House at the University of Illinois

Material Class	Fort Leonard Wood
Lithics	30
Historic Ceramics	20
Prehistoric Ceramics	0
Fauna	0
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	25
Glass	25
Textile	0
Other	0
Total	100

have the site number, bag number, provenience, material description, and project number.

Human Skeletal Remains

No DoD human skeletal remains are curated at PSAP.

Records Storage

Records (Table 275) are stored in a three-ring plastic binder and in a set of map storage drawers. The storage unit measures 35.5 x 46.5 x 59 (inches, d x w x h). The front of the drawer with the Fort Leonard Wood maps is labeled "Ft. Leonard Wood Ft. Riley" with a computer-generated paper tag in a metal holder. A paper label is taped to the binder.

Table 275.
Linear Footage of DoD Associated Documentation Housed at the University of Illinois

Materials	Fort Leonard Wood
Paper	0.21
Reports	0.00
Oversized*	0.23
Audiovisual	0.00
Photographic	0.04
Computer	0.00
Total	0.48

* Includes maps and other oversized documents.

Paper Records

Field records, site forms, and analysis sheets totaling 0.21 linear feet are present among the Fort Leonard Wood collections. Some of the sheets of paper are attached to the front cover of the binder with a metal and plastic binder clip.

Maps

In total, 0.23 linear feet of topographic and blue line maps are stored at PSAP in the map cases.

Photographs

Photographs comprising 0.04 linear feet black-and-white prints, negatives, color slides, and contact sheets are in the binder of Fort Leonard Wood records.

Collections Management Standards

PSAP does not permanently curate archaeological collections. All Fort Leonard Wood collections are scheduled to be sent to U.S. Army Construction Engineering Laboratory (CERL) in Champaign. At CERL, the collections are prepared for curation, and then transferred to University of Missouri, Columbia, for permanent storage.

Comments

The maps stored in the map case are part of PSAP's working map collection. They will not be sent to CERL for curation at University of Missouri with the artifacts and other records.

Recommendations

1. Artifacts require placement in appropriately labeled archival primary containers.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

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Ball State University

Archaeological Resources Management Service
Muncie, Indiana

Repository Summary

Volume of Artifacts: 16.04 ft^3

Collection Origin: Camp Atterbury Army National Guard Base, Indiana; Grissom Air Force Base, Indiana; Newport Army Ammunition Plant, Indiana

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 6.8 linear feet

Collection Origin: Camp Atterbury Army National Guard Base, Indiana; Grissom Air Force Base, Indiana; Newport Army Ammunition Plant, Indiana

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: January 27 1999

Point of Contact: Dr. Donald Cochran, Director

The Archaeological Resources Management Service (ARMS) at Ball State University was organized in 1978, and is a program that provides practical experience in archaeological research to students by performing archaeological assessments for various government agencies, engineering firms, and corporations in order to assist them in their environmental compliance. ARMS have performed cultural resources surveys on Department of Defense (DoD) installations and presently curate collections resulting from these surveys. In addition to this, ARMS also acts as a repository for DoD collections resulting from cultural resource management projects performed by other institutions. Presently, ARMS curates approximately 16.04 cubic feet of archaeological material and 6.8 linear feet of associated records from cultural resource management projects on three DoD installations in Indiana: Camp Atterbury Army National Guard Base, Grissom Air Force Base, and Newport Army Ammunition Plant (Table 276).

Table 276.
Volume of DoD Archaeological Collections Housed at Ball State University

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Camp Atterbury	10.24	5.61
Grissom Air Force Basg	2.24	0.88
Newport Army Ammunition Plant	3.56	0.31
Totals	16.04	6.80

Repository

Archaeological collections at the Archaeological Resource Management Services are stored in three rooms in the Burkhardt building on the campus of

Figure 172. Exterior of the Burkhardt Building that contains the Archaeological Resource Management Services.

Ball State University (Figure 172). Approximately 3,866 ft² of space in this building is devoted to collections management support services. Artifact collections at ARMS are generally stored in a basement room (Room 005). Field notes, site survey files, and CRM reports for ARMS projects are kept in the Indiana reference library (Room 314B). Photographs are kept in the laboratory (Room 314D). This building, built in 1922, was completely renovated in the mid-1980's and is used for offices, university classrooms, and laboratories. The exterior of this three-story building is constructed of brick with a stone foundation, and a built-up asphalt roof.

Collections Storage Area

The DoD archaeological collections are located in an approximately 1,100 ft² room in the basement of the Burkhardt building (Figure 173). The internal structure of this room is very similar to the rest of the building with cement floors, sheetrock/wallboard internal walls, cement and cement block external walls, and suspended acoustical ceiling. There are no windows in the collection storage room. Access to the collection storage area is limited, only five people have keys to this room. Additionally, exterior entrances to the building are locked during nonschool hours. Activities in the collection storage area include long-term and temporary storage of artifacts and records. Collections present in the area are archaeological in nature, and currently occupy in excess of 75% of the storage space. The collection storage room in the basement is environmentally

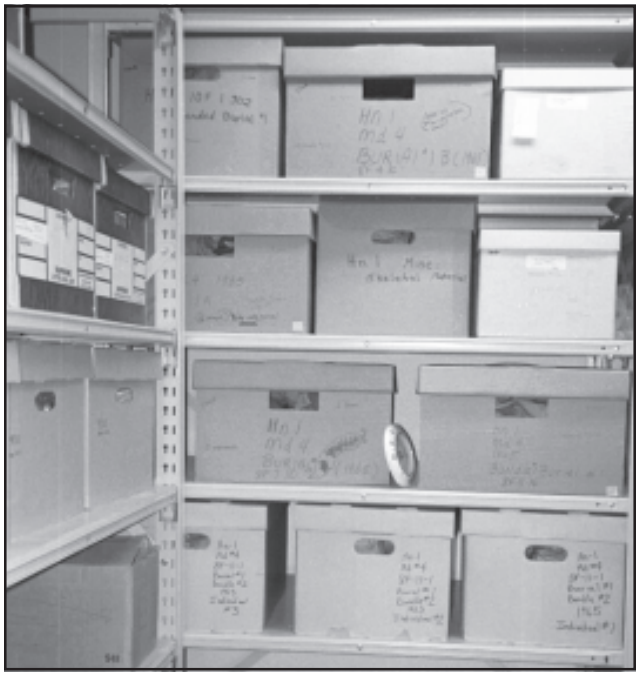

Figure 173. Collection storage room located in the basement.

controlled by a separate heating/air conditioning unit. A humidity-monitoring device is in place on a shelf in the collection storage room. The curation repository has no written pest management policy nor spraying schedule, however, no food is allowed in the collection storage area, and if any infestations were identified the university's physical plant would be notified.

Artifact Storage

Archaeological artifacts from Camp Atterbury, Grissom AFB, and Newport AAP are stored in 13 nonarchival boxes on a nonmovable metal shelving unit in the basement collection storage room. The shelves are set so as no overstacking of boxes can occur. Each of the 13 nonarchival boxes measure approximately 15.5 x 12.25 x 10 (inches, d x w x h) (Figure 174). The labels of these primary containers are only consistent within specific projects, though all federal collections have yellow tags taped to the front of the box denoting they are federal collections. Within the boxes 84% of the collections are stored in 2- to 4-mil plastic zip-lock bags, 15% are stored in paper bags, and 1% historic artifacts from the WAPORA project on Camp Atterbury, are stored in a shoe box. All the paper bags and a small percentage of the plastic bags need

Figure 174. Examples of the Department of Defense collecitons located in the laboratory.

Table 277.
Percentage by Volume of DoD Artifacts Housed at Ball State University.

Material Class	Camp Atterbury	Grissom AFB	Newport Army Ammunition Plant
Lithics	24.0	0.7	13.3
Historic Ceramics	2.8	3.5	4.4
Prehistoric Ceramics	19.1	0.0	0.0
Fauna	0.0	1.4	0.0
Shell	0.0	0.0	0.0
Botanical	0.0	0.0	0.0
Flotation	1.3	0.0	0.0
Soil	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0
Brick	0.3	1.4	2.2
Metal	4.9	1.4	1.1
Glass	11.1	5.6	1.1
Textile	0.0	0.0	0.0
Other (plastic)	0.4	0.0	0.0
Total	63.9	14.0	22.1

replacement. None of the secondary containers appear to contain acid-free tags.

Artifacts from these four federal projects encompass approximately 16.04 ft^3 (Table 277) The collections tend to be sorted by provenience and in some cases further by material class. None of the artifacts from the Grissom AFB collection have been cleaned, and only a portion of these artifacts has been directly labeled. However, all the other DoD collections have been cleaned and only the historic artifacts from the WAPORA Camp Atterbury survey do not appear to be directly labeled. Artifact labels generally consist of the site number over the catalog number.

Human Skeletal Remains

No DoD human skeletal remains are curated at Ball State University.

Records Storage

Field notes, site survey files, and cultural resource management (CRM) reports from projects performed by ARMS are kept in the Indiana reference library, Room 314B, in metal filing cabinets. The only DoD collection curated by ARMS for which they were responsible for the fieldwork is the 1982 archaeological survey on Newport Army Ammunition Plant. Associated records (Table 278) from this project are kept in Room 314B. All other DoD collections curated at ARMS are the result of projects performed by outside contractors, and therefore the records associated with these collections have been kept with the collections in the artifact boxes. Photographic materials from DoD projects are presently being stored in an open box in the archaeological laboratory. Accession records are kept for all collections and their associated records in Room 314F by accession number. Accession numbers consist of the year the item(s) was accessioned plus a sequence of numbers.

Table 278.
Linear Footage of DoD Associated Documentation Housed at Ball State University

Materials	Camp Atterbury	Grissom AFB	Newport Army Ammunition Plant
Paper	3.96	0.83	0.10
Reports	0.46	0.04	0.17
Oversized*	0.24	0.00	0.04
Audiovisual	0.00	0.00	0.00
Photographic	0.95	0.00	0.00
Computer	0.00	0.00	0.00
Total	5.61	0.88	0.31

* Includes maps and other oversized documents.

Paper Records

Paper records consist of administrative records, survey, excavation and analysis records, and site forms. Some contaminants, such as paper clips and staples, are found throughout the collection,

however, as a whole these records are in good condition.

Reports

Included in the document collections for Newport Army Ammunition Plant, Grissom AFB, and Camp Atterbury are copies of the reports that comprise approximately 0.67 linear feet of the records.

Photographs

Photographs have been removed from the associated document files for both of the Camp Atterbury projects and are presently being stored in the archaeology laboratory. According to a memorandum placed with the collections the photographic materials are stored in the accession log file. These records consist of color prints, black and white prints, slides, negatives, photographic record sheets, and log sheets comprising approximately 0.95 linear feet of record. The photographic records have been archivally processed and have been placed in archival sleeves, however they are presently stored in nonarchival inter-campus envelopes. These envelopes marked with the specific projects accession information have been placed alongside envelopes containing photographic material from other projects in an archival box in a corner of the laboratory.

Maps

Working maps (those used during the fieldwork), historic maps, and installation maps have been folded to fit into 8 ½ x 11-inch manila folders and envelopes. The maps for all of the four projects occupy approximately 0.28 linear feet of space.

Collection Management Standards

Ball State University is a long-term curation repository. It possesses written policies consisting of artifact processing, artifact labeling, photograph labeling, acquisitions, deaccessions, loans, inventory, disaster plan, accessions, and access to collections (1989, 1998).

Comments

Archaeological Resources Management Services and the Department of Anthropology at Ball State University is a recognized curation repository for the State of Indiana by the State Historic Preservation Office of Indiana.

Recommendations

1. Artifacts require (a) cleaning (when applicable), (b) direct labeling (when applicable), (c) placement in appropriately labeled primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) removal of all contaminates, (c) arrangement in a logical order, (d) packaging in appropriately labeled archival primary and secondary containers, (e) placement of maps in an archival flat file, (f) creation of a finding aid, (g) creation of an archival duplicate copy of paper records, and (h) storage of archival paper copies and original negatives to be stored in a separate, fire-safe, and secure location.

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Indiana State Museum

Indianapolis, Indiana

Repository Summary

Volume of Artifacts: 48.27ft^3

Collection Origin: Fort Benjamin Harrison, Indiana

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 6.95 linear feet

Collection Origin: Fort Benjamin Harrison, Indiana

Compliance Status: Documentation requires complete rehabilitation to comply with federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: January 25-26 1999

Point of Contact: William R. Wepler, Curator of Anthropology

The broad mission of the Indiana State Museum and Historic Sites (ISMHS) is "to collect, preserve and interpret the natural and cultural history of the State of Indiana for past, present and future generations. In addition to this, and in keeping with this mission, an agreement is in place between the museum, the Center of Military History, and the U.S. Army Training and Doctrine Command to curate all Department of Defense (DoD) archaeological collections resulting from past cultural resource management projects on the former Fort Benjamin Harrison. Presently, ISMHS curates approximately 48.27 cubic feet of archaeological material and 6.95 linear feet of associated records from cultural resource management projects on Fort Benjamin Harrison.

Repository

The Indiana State Museum occupies a four-story stone building in downtown Indianapolis (Figure 175). This building was originally constructed in 1905 as the Indianapolis City building serving a municipal function. During the mid-1960's the building was converted into the Indiana State Museum.

Figure 175. Exterior of the Indiana State Museum.

Collections Storage Area

The Fort Benjamin Harrison archaeological collections are being stored in a fourth floor collection storage room in the Indiana State Museum. This storage area is approximately 410 ft^2, and presently about 85% of the available storage space is being utilized. Activities in the collection storage area include permanent and temporary storage of artifacts and records, and space for study of these materials.

The architectural makeup of the collections storage room consists of carpet covered cement floors, cement walls, and ceiling constructed of plaster. Along the eastern wall of this room the ceiling slants following the line of the exterior copper roof. Within this angled roof are located three sealed windows which have been painted over in order to keep out light. Security within the collection storage area is maintained with limited key access. Additionally, within the museum, areas not open to the public are accessible only through key access on the elevator. During public hours security guards are stationed at the front door to the museum and after public hours the exterior doors to the building are kept locked.

Due to the age and construction of the building environmental controls are extremely variable throughout the museum, and although relative humidity is monitored and controlled within portions of the museum, no such controls exist in the archaeological collections storage room. Fire protection within the collection storage area is maintained with smoke detectors and fire alarms directly wired to the fire department. The pest management program consists of quarterly applications of pyrethroids and monitoring with sticky traps.

Artifact Storage

Archaeological artifacts from Fort Benjamin Harrison are stored on nonmovable metal shelving units in 22 archival boxes measuring 15.5 x 10 x 12.5 (inches, d x w x h), 4 nonarchival 15.25 x 12.25 x 10 (inches, d x w x h), and 15 nonarchival boxes 14.5 x 12.5 x 12.25 (inches, d x w x h) (Figure 176). The archival boxes and the four nonarchival boxes hold an aggregate of collections from projects on Fort Benjamin Harrison prior to 1994. The remaining 15 nonarchival boxes hold collections

Figure 176. Fort Benjamin Harrison, Indiana collections located in the archaeological collection storage room.

from the 1994 archaeological investigation at Fort Benjamin Harrison by Gray and Pape. The archival boxes have adhesive plastic zip-lock label holders containing computer generated box labels on acid-free paper tags. The information contained on these labels is box number, site number, and provenience. All other nonarchival boxes are labeled directly in marker with the box number. Within the boxes 96% of the collections are stored in 2- to 4-mil plastic zip-lock bags, and 4% are stored in small archival boxes. A small percentage of the plastic bags need replacement. None of the secondary containers appear to contain acid-free tags. A variety of materials have been used inside the boxes as cushioning and include Styrofoam packing peanuts, Flo-pak cell-o air filled bags, and archival polyfelt.

Artifacts from Fort Benjamin encompass approximately 48.27 ft^3 (Table 279). The collections tend to be sorted by site number, provenience, and material class. Almost 100% of the collections have been cleaned and directly labeled; the exception is fragile metal artifacts found in box 25, which were not washed or directly labeled. In addition, small artifacts from the Gray and Pape investigation, which do not readily lend themselves to be directly labeled, have small velum tags with the appropriate label information placed inside their bags.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Indiana State Museum.

Table 279.
Percentage by Volume of DoD Artifacts Housed at the Indiana State Museum

Materials	Fort Benjamin Harrison
Lithics	18.7
Prehistoric Ceramics	0.0
Fauna	3.3
Shell (unmodified)	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	1.7
Human Skeletal Remains	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick / Masonry	7.3
Historic Ceramics	23.7
Metal	14.3
Glass	29.3
Textiles	0.0
Other (leather, plastic, wood, coal, asbestos, tar paper, cement, and clinkers)	1.7
Total	100.0

Records Storage

Five boxes of records from archaeological projects on Fort Benjamin Harrison prior to 1994 were transferred from the Directorate of Public Works, Fort Benjamin Harrison, to Indiana State Museum in August 1995. These records have since been removed from their boxes and placed into a three-drawer letter- size filing cabinet in the archaeological collection storage room (Figure 177). Acidic cardboard dividers separate the records keeping their original box organization. Associated documentation from the 1994 archaeological investigation of Fort Benjamin Harrison are kept in two nonarchival 12.25 x 14.5 x 12.5 (inches, d x w x h) boxes on the nonmovable metal shelves alongside the artifact collections. These records total approximately 7 linear feet (Table 280).

Figure 177. Storage of associated documentation from Fort Benjamin Harrison, Indiana.

Table 280.
Linear Footage of DoD Associated Documentation Housed at the Indiana State Museum

Materials	Fort Benjamin Harrison
Paper	4.67
Reports	1.33
Oversized*	0.46
Audiovisual	0.00
Photographic	0.49
Computer	0.01
Total	6.95

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 4.67 linear feet. These records consist of administrative records, background research, survey, excavation and analysis records, and site forms. Some contaminants, such as paper clips and staples, are found throughout the collection, however, as a whole these records are in good condition.

Reports

Included in the document collections for Fort Benjamin Harrison are copies of cultural resources reports, comprising approximately 1.33 linear feet of the records. These include draft reports as well as final reports for all the cultural resource projects performed on Fort Benjamin Harrison. Multiple copies of some of these reports are found within these files. Reports from box 4 of the pre-1994 records are in poor condition with ripped covers, all others are in fair to good condition.

Photographs

Photographic records consist of color prints, black and white prints, slides, negatives, and contact sheets comprising approximately 0.49 linear feet of record. Approximately half of these photographic materials have been placed in archival sleeves, the rest are either loose or in nonarchival paper envelopes.

Maps

Working maps (those used during the fieldwork), installation maps, and field maps created during fieldwork have been folded to fit into 8 ½ x 11-inch manila folders. The Fort Benjamin Harrison maps occupy approximately 0.46 linear feet of space.

Computer

One 5.25-inch disk comprises approximately 0.01 linear feet and is contained in a box of paper records.

Collection Management Standards

The Indiana State Museum has a mandate to collect, preserve, and interpret the natural and cultural history of Indiana, and is therefore, a permanent curation repository for collections from the state of Indiana. In order to facilitate the maintenance of these collections a written collection management policy is in place. This written policy covers such activities as artifact processing, artifact labeling, acquisitions, deaccessions, loans, inventory, disaster plan, accessions, as well as access to collections (1991, n.d.).

Comments

1. The Indiana State Museum plans to begin construction of a new repository within the next year. This repository will have all the features expected of a new museum including 5,300ft^2 of space devoted to collections management support services.

2. Plans have been made to cull the "superfluous materials" (brick, coal slag, nondiagnostic (metal) from the Fort Benjamin Harrison collections, thus consolidating the size of the collection.

3. An archaeological field school is planned for the summer of 1999 on the grounds of the former Army installation Fort Benjamin Harrison. Indiana State Museum will provide access to the Fort Benjamin Harrison archaeological collections for research for this project.

4. Tentative plans have been made to provide diagnostic artifacts from the Fort Benjamin Harrison archaeological collections to an interpretive center, which is to be built at a state park on the site of the former Army installation Fort Benjamin Harrison.

Recommendations

1. Artifacts require (a) clean and conserve remaining metal artifacts, (b) replacing 50% of the boxes into appropriately labeled archival primary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminates, (b) arrangement in a logical order; (c) packaging into appropriately labeled archival primary and secondary containers, (d) placement of maps in an archival flat file, (e) creation of a finding aid, (f) creation of an archival duplicate copy of paper records, and (g) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. There is no deaccessioning policy in 36 CFR Part 79 for DoD collections, therefore, Fort Benjamin Harrison collections cannot be "culled."

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Indiana State University

Terre Haute, Indiana

Repository Summary

Volume of Artifacts: 3.36 ft^3

Collection Origin: Jefferson Proving Ground, Indiana; Newport Army Ammunition Plant, Indiana

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.1 linear feet

Collection Origin: Jefferson Proving Ground, Indiana; Newport Army Ammunition Plant, Indiana

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: January 29, 1999

Point of Contact: Dr. Russell Stafford, Curator

The Indiana State University Anthropology Laboratory (ISUAL) stores its Department of Defense (DoD) artifacts and documents in two separate buildings. Artifacts are stored in the lower level of Root Hall (Table 281). Records are stored in Holmstedt Hall, the same building where the ISUAL offices are located.

Table 281.
Volume of DoD Archaeological Collections Housed at Indiana State University

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Jefferson Proving Ground	1.12	0.02
Newport Army Ammunition Plant	2.24	0.08
Totals	3.36	0.10

Repositories

DoD artifacts are stored on the lower level of Root Hall. Root Hall is a university building built for that function. It has a concrete foundation, a brick exterior, and a standing seam metal roof.

Associated documentation from DoD artifact collections is housed in Holmstedt Hall. The building has a concrete foundation and brick exterior. The roof is built-up asphalt. Holmstedt Hall was designed as a university building.

Collections Storage Area

The storage area in Root Hall has poured concrete walls, a concrete floor, no windows, and a corrugated metal ceiling. ISUAL staff members estimate the storage capacity to be 1,500 ft^2. Artifact storage and light record keeping are the only activities that take place in the storage area. A metal gated fence encloses the storage area, which the staff call the "cage" (Figure 178). Only archaeological collections are stored in this particular cage, but

Figure 178. The archaeological storage "cage" in Root Hall.

paleontological and other types of collections are stored in other cages in the room. Between 50% and 60% of the storage space is filled. The temperature in the collections storage area is controlled with central air conditioning and forced-air heat. There is a padlock on the door of the cage, and the main door of Root Hall is locked after business hours. Only the custodians have a key for this door. A sprinkler system is in place in the enclosed area. Some of the boxes (not containing DoD collections) have been stacked to a height where they are directly below a sprinkler head. The university-wide pest management system is in effect throughout Root Hall, including the storage areas. There are no visible signs of pest infestation.

DoD records are stored in Room 15, ISUAL Records. This room has a tile floor, concrete block interior walls, and a suspended acoustical ceiling. There are no windows. Holmstedt Hall uses the same type of environmental controls and pest management system as those in Root Hall. Sprinklers are present in other parts of Holmstedt Hall, but none are located in the collections storage area itself. The door has a key lock. About 75% of the 400 ft^2 collections storage area is full.

Table 282.
Percentage by Volume of DoD Artifacts Housed at Indiana State University

Material Class	Jefferson Proving Ground	Newport Army Ammunition Plant
Lithics	33.3	18.7
Historic Ceramics	0.0	29.3
Prehistoric Ceramics	0.0	0.0
Fauna	0.0	0.0
Shell	0.0	0.0
Botanical	0.0	0.0
Flotation	0.0	0.0
Soil	0.0	0.0
^{14}C	0.0	0.0
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.0
Worked Bone	0.0	0.0
Brick	0.0	0.8
Metal	0.0	3.3
Glass	0.0	14.3
Textile	0.0	0.0
Other (leather)	0.0	0.3
Total	33.3	66.7

Artifact Storage

DoD artifacts (Table 282) are stored in archival boxes stacked on metal shelves (Figure 179). Attached to the front of the box is a computer-generated adhesive label bearing the accession number and box number. All of the Newport AAP artifacts and approximately 80% of the Jefferson Proving Ground artifacts are in paper bags within the boxes; the remaining 20% of the Jefferson Proving Ground artifacts are in plastic zip-lock bags. The bags are labeled directly in marker with the site number, provenience, and project. The date, catalog number, bag number, and investigator's initials are

Figure 179. Example of boxes stacked on metal shelves that are located directly beneath a sprinkler head in the collections storage area.

included on bag tags in one box. All artifacts have been washed and sorted by site number and provenience. None of the artifacts have been labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at Indiana State University.

Records Storage

Paper and photographic records from Jefferson Proving Ground and Newport Army Ammunition Plant are currently housed in Holmstedt Hall (Table 283). The records are stored in 4-drawer metal filing cabinets. The cabinets measure 28 x 15 x 52 (inches, d x w x h). Each drawer measures 28 x 15 x 11 (inches, d x w x h) and is labeled with a paper insert. The typed label reads "CRM Reports by County." Within each drawer, records are kept in manila or accordion folders. A typed adhesive label, with the contractor's name and the project name and date, has been affixed to the folder containing records from Jefferson Proving Ground (Figure 180). The records from Newport Army Ammunition Plant are stored in an accordion folder with a similar label. Photographic material is kept in archival plastic sleeves.

Table 283.
Linear Footage of DoD Associated Documentation Housed at Indiana State University

Materials	Jefferson Proving Ground	Newport Army Ammunition Plant
Paper	0.02	0.05
Reports	0.00	0.00
Oversized*	0.00	0.00
Audiovisual	0.00	0.00
Photographic	0.00	0.03
Computer	0.00	0.00
Total	0.02	0.08

* Includes maps and other oversized documents.

Paper Records

Site forms constitute all of the records from Jefferson Proving Ground (0.02 linear feet). About 0.05 linear feet of analysis forms are in the document collections from Newport Army Ammunition Plant. Documents are in good condition but are not processed for long-term curation (some contain staples or other contaminants).

Figure 180. The filing system used for records.

Photographs

The Newport Army Ammunition Plant collections contain approximately 0.01 linear feet of prints and 0.02 linear feet of slides.

Collections Management Standards

Indiana State University is a long-term curation repository, however, they currently do not have a comprehensive curation plan.

Comments

1. Artifacts are stored in Root Hall and records are in Holmstedt Hall.

2. Collections require rehabilitation to comply with 36 CFR Part 79.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies in a separate, fire-safe, and secure location.

3. Create a comprehensive curation policy.

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Indiana University-Bloomington

Glenn A. Black Laboratory of Archaeology
Bloomington, Indiana

Repository Summary

Volume of Artifacts: 11.83 ft^3

Collection Origin: Camp Atterbury Army National Guard Base, Indiana; Indiana Army Ammunition Plant, Indiana; Jefferson Proving Ground, Indiana; Newport Army Ammunition Plant, Indiana

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 2.98 linear feet

Collection Origin: Jefferson Proving Ground, Indiana; Newport Army Ammunition Plant, Indiana

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: January 28, 1999

Point of Contact: Noel Justice, Curator of Collections

The Glenn A. Black Laboratory is located at Indiana University in Bloomington. It was established in 1965 with the transfer of archaeological collections from the Indiana Historical Society. The Laboratory's primary goal is to house archaeological collections and to provide resources for scholars to research the history and prehistory of Indiana. The Laboratory houses approximately 11.8 ft^3 of artifacts and 2.98 linear feet of associated documents from Department of Defense (DoD) installations in Indiana (Table 284).

Table 284.
Volume of DoD Archaeological Collections Housed at Indiana University-Bloomington

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Camp Atterbury	6.55	—
Indiana Army Ammunition Plant	1.73	—
Jefferson Proving Ground	1.09	2.71
Newport Army Ammunition Plant	2.46	0.27
Totals	11.83	2.98

Repository

The Glenn A. Black Laboratory of Archaeology was built as a museum in 1971. The structure was specifically designed to support archaeological research and collections curation. It has a concrete foundation, poured concrete exterior walls, and a rubber roof. The original roof was built-up asphalt. The building is presently used as a museum, a collections repository, an office building, and a university laboratory. Small amounts of comparative

faunal, botanical, and paleontological collections are also stored at the Black Laboratory. DoD collections are stored in a total of four different rooms in the basement of the museum building. Artifacts are stored in the main collections room and the main storage room, while records are stored in the records room and in an office.

Collections Storage Area

The majority of the archaeological collections at the laboratory are stored in the Main Storage Room. This room, as well as the other three storage rooms, has concrete floors, concrete block interior walls, and plaster ceilings. None of the rooms have windows. Storage capacity is about 75% in use. Central air-conditioning and heat are used to control the temperature in the storage areas. A keypad security system and key locks on the door control access to the storage rooms. Manual fire alarms and fire extinguishers are present (Figure 181). No scheduled, routine pest management program is in place. If pests are detected, Black Lab staff members notify the university, who sends an exterminator the same day. No signs of infestation were visible during the assessment, but the museum has had a problem with termites in the past.

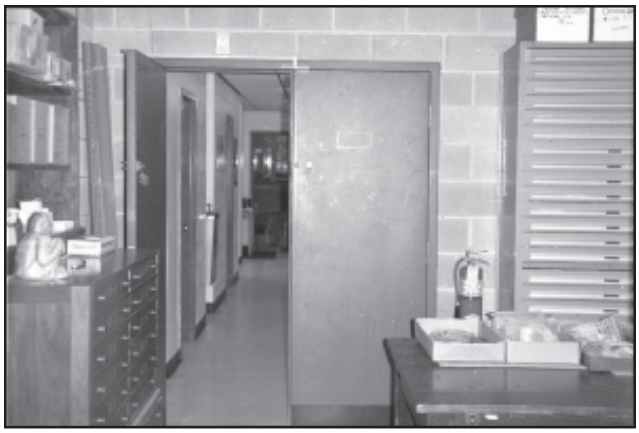

Figure 181. The door leading to the main collections storage area.

Less than one ft³ of artifacts is stored in the Main Collections Room, which is adjacent to the Main Storage Room. Type collections and artifacts viewed most frequently by researchers are stored here. The environmental controls are the same as in the Main Storage Room. No pest management measures are taken unless infestation becomes a problem. No signs of infestation are evident.

The majority of the Jefferson Proving Ground documents, including both paper and photographic materials, are stored in the Records Room. Central air-conditioning and heating are used to maintain the climate, and the university pest control service is used only if there is a problem with infestation. No evidence of infestation is present.

DoD records are also stored in an office across the hall from the Records Room. The door to the office has a key-lock. Environmental control is provided by central air conditioning and heating. The same pest control procedures described above are used in the office.

Artifact Storage

Approximately 11.8 ft³ DoD artifacts are stored in the Main Storage Room and Main Collections Room (Table 285). In the Main Storage Room DoD artifacts are stored in acidic cardboard boxes stacked on nonmovable metal shelves (Figure 182). Boxes are labeled directly in marker with the project information and accession numbers. Each box measures 17.25 x 10.25 x 8 (inches, d x w x h).

Figure 182. Example of collection storage in the main storage room.

Artifacts from two projects are bagged in paper bags folded shut. The bags from one project are labeled in pencil with the site number, accession number, and catalog number; the bags from the other project are labeled in pen with the same information. Artifacts from the other three projects are bagged in zip-lock plastic bags. The bags are labeled either directly in marker or else with a yellow card inside the bag. The site number and catalog number are given on all labels; some also include the provenience, date,

Table 285.
Percentage by Volume of DoD Artifacts Housed at Indiana University-Bloomington

Material Class	Camp Atterbury	Indiana Army Ammunition Plant	Jefferson Proving Ground	Newport Army Ammunition Plant
Lithics	7.8	8.4	9.2	7.7
Historic Ceramics	18.5	0.0	0.0	6.2
Prehistoric Ceramics	0.0	0.0	0.0	0.0
Fauna	0.0	2.2	0.0	0.0
Shell	0.9	0.4	0.0	0.0
Botanical	0.0	0.0	0.0	0.0
Flotation	0.0	0.0	0.0	0.0
Soil	0.0	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0
Brick	0.6	0.0	0.0	0.4
Metal	13.8	3.7	0.0	0.2
Glass	13.8	0.0	0.0	6.2
Textile	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0
Total	55.4	14.7	9.2	20.7

investigator, material class, and/or report number. All artifacts have been washed and labeled directly in pen with the accession number over the catalog number. The material is sorted by material class and/or provenience/site number.

In the Main Collections Room, artifacts are stored in metal drawers (Figure 183). The drawers have an adhesive label with the accession numbers of the artifacts listed inside. Each drawer measures 12 x 18 x 32 (inches, d x w x h). The Camp Atterbury collection is bagged in 4-mil plastic zip-lock bags that are labeled directly in marker. The label gives the site number, accession numbers, and the designation "Type Collection." The Indiana AAP collection is stored loose in the drawer. Both artifacts are labeled directly in pen with the accession number and the catalog number.

Figure 183. The main collections room.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Glenn A. Black Laboratory.

Records Storage

Records in the Records Room are kept in two folded acidic cardboard boxes with telescoping lids (Table 286). The boxes, which measure 16 x12.5 x 10 (inches, d x w x h), have been reinforced with packaging tape. A paper label with the project information and accession numbers written in marker is duct-taped to the box. The boxes are stacked on top of a metal supplies cabinet. Inside the boxes, all records are packaged in manila file folders. The folders are labeled directly in pen with a project number and contents or project number and site number. Three types of photographic materials are kept in plastic archival sleeves packed in manila file folders. The sleeves for the negatives and the slides are labeled directly in marker with "1114-149" and the roll number. The contact sheets are not labeled.

Documents in the office are stored in a 5-drawer metal filing cabinet measuring 28.5 x 15 x 58.5 (inches, d x w x h). Each drawer measures 28.5

Table 286.
Linear Footage of DoD Associated Documentation at Indiana University-Bloomington

Materials	Jefferson Proving Ground	Newport Army Ammunition Plant
Paper	2.03	0.16
Reports	0.44	0.10
Oversized*	0.09	0.01
Audiovisual	0.00	0.00
Photographic	0.15	0.00
Computer	0.00	0.00
Total	2.71	0.27

* Includes maps and other oversized documents.

x 15 x 11 (inches, d x w x h) and is labeled with a paper insert. The insert is labeled in marker and reads "R01 1996." Within each drawer, records are kept in manila or accordion file folders. The Newport AAP paper records are kept in an accordion file folder labeled directly in marker with the project information. Records from Jefferson Proving Ground are kept in a single manila folder. A typed adhesive label, with the contractor's name and the project name and date, has been affixed to the folder. These records were not assessed in their usual storage area, which is most likely the filing cabinet in the office.

Paper Records

Paper records from Jefferson Proving Ground include field notes, bag lists, photo logs, site forms, and administrative records, for a total of 2.03 linear feet. Newport AAP paper records comprise 0.16 linear feet of field notes.

Reports

Reports total approximately 0.4 linear feet from Jefferson Proving Ground and 0.1 linear feet from Newport AAP.

Photographs

The records from Jefferson Proving Ground include 0.02 linear feet of negatives, 0.08 linear feet of slides, and 0.05 linear feet of contact sheets.

Maps

Maps comprise 0.1 linear feet of the Jefferson Proving Ground and Newport AAP collections and are folded.

Computer Records

The collections from Jefferson Proving Ground contain one floppy disk. This disk was noted but not quantified into linear feet as were the other record types due to its small size.

Collections Management Standards

According to the Black Laboratory's "Guidelines for Curation of Archaeological Collections" (1998), the repository manages its collections according to 36 CFR Part 79. The Glenn A. Black Laboratory has detailed policies concerning minimum requirements for acceptance of archaeological collections. Curation guidelines regarding packaging and labeling procedures for both artifacts and documents are clearly outlined.

Comments

1. The Laboratory receives some financial support from its in-house Cultural Resources Management Program.

2. The records currently stored in cardboard boxes stacked on top of a supplies cabinet are going to eventually be repacked in archival boxes and stored inside the cabinet.

Recommendations

1. Artifacts require (a) placement in appropriately labeled archival primary and secondary containers, and (b) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) placement of maps in an archival flat file, (c) creation of an archival duplicate copy of paper records, and (d) storage of archival paper copies and original negatives in a separate, fire-safe, secure location.

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University of Iowa

Office of the State Archaeologist
Iowa City, Iowa

Repository Summary

Volume of Artifacts: 18.72 ft^3

Collection Origin: Fort Des Moines, Iowa, and Iowa Army Ammunition Plant, Iowa

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.16 linear feet

Collection Origin: Fort Des Moines, Iowa, and Iowa Army Ammunition Plant, Iowa

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: May 25, 1999

Point of Contact: John Cordell, Collection/ Laboratory Manager

The Office of the State Archaeologist (OSA) is a research and educational unit of the University of Iowa. OSA conducts archaeological fieldwork and serves as a curation repository for agencies and organizations throughout Iowa. They also maintain the state site files and other research materials. OSA has been in its current location since 1998. Currently housed at OSA are 18.72 ft^3 of artifacts and 0.16 linear feet of records from two Department of Defense (DoD) installations in Iowa (Table 287).

Table 287.
Volume of DoD Archaeological Collections Housed at the University of Iowa

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Fort Des Moines	1.91	0.10
Iowa Army Ammunition Plant	16.81	0.06
Totals	18.72	0.16

Repository

OSA currently occupies the 700 Clinton Street Building that was constructed in the 1960s as a grocery store. The building has a concrete foundation and brick exterior walls. The roof is made of bitumen and gypsum. OSA shares the building with the University of Iowa radio stations. A portion of the basement is used by the University Business Office for storage.

Collection Storage Areas

DoD collections are stored in four areas at OSA. Artifacts are stored in Rooms 120 and B3 and Rooms 104 and 130 hold the document collections. The majority of the DoD artifacts are stored in Room 120, the main storage room at OSA (Figure 184). Collections are stored by accession number. The

Figure 184. Department of Defense artifact collections in the main repository.

storage room has a concrete floor, a fiberboard ceiling, and interior walls of dry wall. There are no windows. The storage space consists of a 560 ft^2 area of movable metal shelves and a 75 ft^2 entry, with nonmovable metal shelves against one wall. Environmental controls Room 120 consist of central air-conditioning and heating. A digital temperature and humidity monitor is used to maintain proper preservation conditions. Security measures include a key lock and a dead-bolt lock on the door. Five individuals have a key to this room. Campus security patrols the building three times a day, at night, and on weekends. Smoke detectors are present. Pest control services are requested as-needed. The building has termites, but they have not been a problem for the collections. According to Mr. Cordell, OSA had a problem with "swarmers" last spring; no signs of infestation were present at the time of the assessment.

Oversized artifact collections are stored in the basement in Room B3. Both the floor and ceiling are made of concrete. Of the four interior walls, one is made of concrete block, one is made of strandboard, and two are made of dry wall. The total storage area is 896 ft^2. Central air-conditioning, central heating, and dehumidifiers control the climate in Room B3. The door to Room B3 has a key lock; the door at the bottom of the steps that leads to the basement rooms also has a key lock. There are sprinklers in Room B3, but no smoke detectors or manual fire alarms. The fire protection system is local only. The room is temporarily being used as an artifact study room. The usual workroom was flooded at the time of the assessment, so tables and chairs were moved into the storage room. About 100% of the storage space in Room B3 is occupied.

Room 104 is the archives and documents storage room. This room is used as a library and as a repository for maps and other types of documents. The only DoD records stored in Room 104 are reports. The reports are stored directly on bookshelves. The floor in Room 104 is carpeted concrete. Three of the interior walls are wallboard; the fourth is concrete block under large windows that do not open. The windows are not covered. The total storage area of the archives room is 560 ft^2. Room 104 is used for records study, records storage, and photograph storage. Storage capacity is at 75%. Environmental controls consist of central air-conditioning and heating. The door to the archives room has a key lock. No fire prevention or suppression devices are present. The area is treated for pests as-needed; no signs of infestation are present.

Room 130 is the catalog and analysis laboratory. Records are the only DoD collections in this room. It has a concrete floor, wallboard interior walls, and a gypsum ceiling. There are no windows. Room 130 is used both as a laboratory and as a storage room; activities include artifact washing, processing, and study. Space is also allotted for temporary artifact storage and office space. Storage capacity is at 50%. Environmental controls include central air conditioning and heating. The door to the lab has a key lock. Smoke detectors are present in the ductwork. Treatment for pest management is administered as-needed; no signs of infestation are evident.

Artifact Storage

Collections in Room 120 are stored on movable metal shelves that measure 1 x 10 x 10 (feet, d x w x h). Artifacts are packed in boxes that come in "full" size [11 x 7.5 x 5 (inches, d x w x h)] and "half" size [11 x 7.5 x 2.5 (inches, d x w x h)]. A few of these boxes are lined with acid-free paper (Figure 185). Several contain acid-free lined cardboard trays containing the bagged artifacts. Inside the box or tray, artifacts are packed in plastic zip-lock bags or paper bags. In

Figure 185. Artifacts from Iowa Army Ammunition Plant are stored in half- and fill-sized cardboard boxes.

several cases, the materials are double bagged in smaller plastic and paper bags which are secured with rubber bands. Artifacts are also packed in paper envelopes or plastic film canisters, which are then bagged in plastic zip-lock bags. Paper towels, ethafoam, newspaper, and bags of styrofoam peanuts are used to cushion several artifacts. All artifacts are washed, sorted by provenience, and labeled directly in pen or in ink on white correction fluid. All artifacts are labeled with the site number; some also have a catalog or accession number.

DoD artifacts (Table 288) in B3 are stored in three acidic cardboard boxes stacked on open metal nonmovable shelves (Figure 186). On average, the boxes measure 13 x 10 x 13 (inches, d x w x h). The boxes are labeled with a computer-generated, acid-free adhesive label. Boxes have either a telescoping lid or folded flaps. Within the boxes, artifacts are packed in plastic zip-lock bags. The bags are labeled directly in marker with the project, site number, provenience, material class, catalog number, date, and investigators' initials. All artifacts are washed, sorted by provenience, and labeled directly in pen or in ink on white correction fluid. All artifacts are labeled with the site number; some also have a catalog or accession number.

Table 288.
Percentage by Volume of DoD Artifacts Housed at the University of Iowa

Material Class	Fort Des Moines	Iowa Army Ammunition Plant
Lithics	0.5	28.4
Historic Ceramics	1.0	17.3
Prehistoric Ceramics	0.6	0.2
Fauna	1.9	0.0
Shell	0.1	0.0
Botanical	0.0	0.3
Flotation	0.0	0.0
Soil	0.0	0.0
^{14}C	0.0	0.0
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.9
Worked Bone	0.0	0.0
Brick	2.6	9.2
Metal	1.0	7.9
Glass	2.0	23.3
Textile	0.0	0.0
Other (plastic, leather, asphalt, coal, and wood)	0.5	2.3
Total	10.2	89.8

Figure 186. Artifacts are stored in a variety of different sized cardboard boxes in the basement storage room B3.

Human Skeletal Remains

No DoD human skeletal remains are curated at the University of Iowa.

Records Storage

The records (Table 289) in Room 104 are reports stored on nonmovable metal library book shelving unit that measures 7 x 36 x 85 (inches, d x w x h). The reports are stored directly on the shelves, which are unlabeled. Each shelf measures 7 x 36 x 12 (inches, d x w x h). In Room 130, approximately half of the DoD records are stored in a metal filing cabinet, the other half in a glass and metal enclosed shelving unit. The file cabinet measures 29 x 15 x 52.5 (inches, d x w x h) and holds letter-sized documents. The drawer is labeled with a paper insert. "OSA Curation Services" and the contents of the drawer are written in pen. The metal shelf is accessed by a sliding glass door. Neither the metal

Table 289.
Linear Footage of DoD Associated Documentation Housed at the University of Iowa

Materials	Fort Des Moines	Iowa Army Ammunition Plant
Paper	0.04	0.05
Reports	0.06	0.00
Oversized*	0.00	0.01
Audiovisual	0.00	0.00
Photographic	0.00	0.00
Computer	0.00	0.00
Total	0.10	0.06

* Includes maps and other oversized documents.

shelf nor the glass door is labeled. Paperwork stored in the file cabinet is in manila file folders. Some of these are acidic, some are acid-free. The folders are labeled directly in pencil. The records stored on the shelf are in unlabeled plastic three-ring binders (Figure 187).

Figure 187. Catalog sheets are kept in plastic three-ring binders and stored in this metal and glass cabinet that is located in the main lab.

Paper Records

Approximately 0.09 linear feet of administrative files, one-quarter inch of correspondences, and catalog sheets are kept in the binders and in the filing cabinet. All records are organized by project.

Reports

There are 0.06 linear feet of reports from Fort Des Moines. The Fort Des Moines reports are bound with staples and a metal clasp. The reports are arranged by project.

Maps

There are 0.01 linear feet of maps from Iowa Army Ammunition Plant.

Collections Management Standards

OSA at the University of Iowa is a long-term curation facility with a comprehensive curation policy.

Comments

1. OSA is trying to obtain the rest of the basement storage space. If successful, some of the archaeological collections may be moved to a different room.

2. Most artifacts are bagged individually.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) creation of a finding aid, (c) creation of an archival duplicate copy of paper records that is stored in a separate, fire-safe, and secure location.

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University of Kansas

Museum of Anthropology
Lawrence, Kansas

Repository Summary

Volume of Artifacts: 0.84 ft^3

Collection Origin: Lake City Army Ammunition Plant, Missouri

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.03 linear feet

Collection Origin: Lake City Army Ammunition Plant, Missouri

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: May 21, 1999

Point of Contact: Dr. Mary Adair, Associate Curator

Department of Defense (DoD) archaeological materials from Lake City Army Ammunition Plant (LCAAP) are stored in one room in Fraser Hall on the University of Kansas (KU) campus in Lawrence. Approximately 0.84 ft^3 of artifacts and 0.03 linear feet of associated documentation from a project conducted at LCAAP are housed Fraser Hall. Fraser Hall was not visited during the assessment of the LCAAP collections as the collections had been pulled and brought to Spooner Hall for inspection, and Fraser Hall had previously been assessed on a previous St. Louis District visit. Therefore, portions of this chapter are taken from that project's report (St. Louis District 1999).

Repository

Fraser Hall is seven stories tall and serves mainly as a classroom and offices building. Built in 1967, Fraser Hall has a limestone veneer with a concrete frame construction. The basement area serves as a collection storage area for the Museum of Anthropology.

Collections Storage Area

Room 10, in the basement of Fraser Hall (measures 863 $ft^{2)}$), serves as the main collections storage area for the museum, as well as laboratory/work space. Room 10 has sealed concrete floors, walls and ceiling, and there are no windows. Both the artifacts and records from LCAAP are stored there. The university central plant serves Fraser Hall for heating and cooling, providing hot water heat and a condenser system for cool air. The building has its own handling system to circulate air throughout the building. Room 10 does not have a separate heating and ventilating system, but is dependent on the overall system for the building. Room 10 is secured

with a dead-bolt lock. Access is controlled by possession of keys by faculty and designated graduate students only. Fraser Hall is not protected with intrusion alarms, motion detectors, or keypad access, but the entire building is locked during off-hours. It is not equipped with an automatic sprinkler system, but fire extinguishers and fire hoses are located throughout the building. None of these fire prevention and suppression measures are present in Room 10.

Artifact Storage

Archaeological materials from LCAAP are stored on nonmovable, open, metal utility shelving units (Figure188) measuring 24 x 192 x 84 (inches, d x w x h). An acidic cardboard box measuring 23.75 x 17.5 x 3.5 (inches, d x w x h) is the primary container for the artifacts. The secondary container is one small acidic cardboard box (Figure 189) measuring 3.5 x 2.5 x 1.25 (inches, d x w x h). The smaller box has a telescoping lid. Artifacts are loose within this smaller box. The artifacts encompass approximately 0.84 ft^3 (Table290). All are washed while approximately 40% are labeled using an adhesive label.

Figure 188. Storage units used for archaeological collections.

Figure 189. Extent of archaeological collections from Lake City Army Ammunition Plant.

Table 290.
Percentage by Volume of DoD Artifacts Housed at the University of Kansas

Material Class	Lake City Army Ammunition Plant
Lithics	100
Historic Ceramics	0
Prehistoric Ceramics	0
Fauna	0
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	0
Glass	0
Textile	0
Other	0
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at the University of Kansas.

Records Storage

The associated documentation from LCAAP, totaling 0.03 linear feet (Table 291), is stored in the same room as the artifacts. They are on nonmovable, open, metal utility shelving units measuring 24 x 192 x 84 (inches, d x w x h). An acidic cardboard box measuring 11 x 4.5 x 13 (inches, d x w x h), with a telescoping lid is the primary container. Slight wear

is evident on the box. The box is labeled both directly and with an adhesive label. The adhesive label partially obscures the direct label on one side of the box. The secondary container consists of an archival envelope with adhesive labels marked with pen, pencil, and type. The envelope is sized to fit letter-sized paper.

Table 291.
Linear Footage of DoD Associated Documentation Housed at the University of Kansas

Materials	Lake City Army Ammunition Plant
Paper	0.01
Reports	0.02
Oversized*	0.00
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.03

* Includes maps and other oversized documents.

Paper Records

The records collection consists of 0.01 linear feet of paper records.

Reports

Reports are located with the paper records and total 0.02 linear feet.

Collections Management Standards

The Museum of Anthropology has drafted an "Accession Policies and Procedures" manual, which addresses accessioning, curation agreements, artifact, document, and photographic materials collection procedures, publications and papers, and a collections management database (1997).

Another document, the "Collections Policy, Museum of Anthropology Photograph Collections, Sales Conditions," (n.d.) details what procedures are necessary to use or buy (reproduce) a photograph from the Museum's collections, and how to safely handle and care for photographs.

Additionally, the Museum has drafted the "Guidelines for the Scholarly Use of Archaeological and Ethnographic Collections," (n.d.) which details what these collections consist of and the procedures for the use of these collections for research purposes.

Comments

1. Artifacts and records are arranged by project and are labeled in a consistent manner.

2. The Museum of Anthropology has a full time collections manager for archaeological collections and associated records.

3. Fraser Hall is structurally sound.

4. Fire suppression devices are not adequate to safeguard the archaeological materials.

5. Intrusion detection and deterrent measures in Fraser Hall do not meet the guidelines in 36 CFR Part 79.

6. Collections management standards and practices have been published.

Recommendations

1. Artifacts require (a) placement of materials in appropriately labeled archival primary and secondary containers, and (b) insertion of acid-free labels in secondary containers.

2. Records require (a) packaging of materials in appropriately labeled archival primary and secondary containers, (b) creation of an archival duplicate copy of all paper records and (c) storage of archival paper copies in a separate, fire-safe, and secure location.

3. Upgrade fire detection and suppression system to include (whatever is needed) fire extinguishers, manual fire alarms, smoke and heat detectors, and a sprinkler/suppression system in Room 10 of Fraser Hall.

4. Additional security measures should be taken including installation of an intrusion alarm system and motion detector in Room 10 of Fraser Hall.

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Cultural Resource Analysts

Lexington, Kentucky

Repository Summary

Volume of Artifacts: 2.19 ft^3

Collection Origin: Fort Campbell, Kentucky

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.54 linear feet

Collection Origin: Fort Campbell, Kentucky

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: March 10, 1999

Point of Contact: Charles Niquette, President; JoAnn Wilson, Lab Director

Approximately 2.19 cubic feet of Department of Defense (DoD) artifacts and 0.54 linear feet of associated documentation are held and/or managed by staff at Cultural Resource Analysts.

Repository

Fort Campbell collections are stored in the processing laboratory that is located in the Cultural Resource Analyst main building. The building is a residence that dates to the 1890s. This building has undergone extensive renovation in order to serve its current function. The building has a stone foundation, brick exterior walls that are covered with wood siding, and an asphalt shingle roof (Figure 190). The building functions as office space as well as a collections repository and processing laboratory.

Figure 190. A turn-of-the-century house serves as the offices of Cultural Resources Analysts.

Collections Storage Area

The laboratory holding the Fort Campbell artifacts and records is an addition to the original residence and constructed to be used specifically as a laboratory. It is located at the rear of the first floor of the building (Figure 191). The floor is concrete covered with tile, and the interior walls and ceiling are sheetrock. There are two unshaded and sealed

Figure 191. The addition that serves as the laboratory and collections storage area.

windows in the laboratory. The area comprises about 180 ft^2 and is used exclusively for artifact receiving, holding, washing, and short-term storage. Records and artifacts are also studied in this area for report preparation. The area is currently at about 90–100% of capacity and all the collections are archaeological in nature. Environmental controls for the artifact room includes central-air conditioning and heat. Security measures include an intrusion alarm, dead-bolt and key locks on the exterior doors, motion detectors, and controlled access. Fire protection measures consist of fire extinguishers, smoke detectors, emergency lights, and a fire alarm wired to the fire department. Pest management occurs on an as-needed basis, however, no evidence of infestation was noted during the assessment.

Artifact Storage

Artifacts from Fort Campbell are stored on nonmovable, wooden shelving units (Figure 192). The collections are stored in acidic cardboard boxes that measure 10 x 12.5 x 15.5 and 11.5 x 16 x 2.5 (inches, d x w x h). One box is secured with a telescoping lid all others are open. Within the boxes, collections are stored in plastic, zip-lock bags that are directly labeled with site and catalog number, provenience information, project name, date, box/bag number, and investigator. Artifacts encompass approximately 2.19 ft^3 (Table 292), and are sorted by site number and provenience. Artifacts have been cleaned and labeled.

Figure 192. Artifact and record storage in the laboratory.

Table 292.
Percentage by Volume of DoD Artifacts Housed at Cultural Resource Analysts

Material Class	Fort Campbell
Lithics	70
Historic Ceramics	7.5
Prehistoric Ceramics	2.5
Fauna	0.0
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	7.5
Metal	7.5
Glass	5.0
Textile	0.0
Other	0.0
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated at Cultural Resource Analysts.

Table 293.
Linear Footage of DoD Associated Documentation Housed at Cultural Resource Analysts

Materials	Fort Campbell
Paper	0.48
Reports	0.00
Oversized*	0.00
Audiovisual	0.00
Photographic	0.06
Computer	0.00
Total	0.54

* Includes maps and other oversized documents.

Records Storage

Records from Fort Campbell encompass approximately 0.54 linear feet (Table 293). The records are housed in beer flats that measure 11.5 x 16 x 2.5 (inches, d x w x h). They are open and have small cards stapled to their fronts with project information written on them in pen. Within these containers records are either stored loose, in paper envelopes or in paper binders that are directly labeled in marker. All records are in good condition.

Paper Records

Paper records comprise approximately 0.48 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection.

Photographs

Photographs encompass 0.06 linear feet of the collection and are stored with the paper records.

Collections Management Standards

Cultural Resource Analysts is an archaeological contracting firm only. They currently serve as a temporary storage repository and do not have a comprehensive curation plan. They do, however, follow University of Kentucky curation guidelines that they adapt with respect to the type of material they are processing.

Comments

1. Artifacts are awaiting final transport to Fort Campbell for permanent curation.

2. Records are arranged by project and stored in the laboratory with artifacts.

Recommendations

1. Artifacts require (a) placement in appropriately labeled archival primary and secondary containers, and (b) acid-free labels should be inserted into each secondary container.

2. Records require (a) separation from the artifact collection container, (b) removal of all contaminants, (c) packaging in appropriately labeled archival primary and secondary containers, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Complete transfer of collections to Fort Campbell for permanent curation.

Editor's Note

As of March 2000 all Fort Campbell collections have been sent to the installation for permanent curation.

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U.S. Army Corps of Engineers, Louisville District

Louisville, Kentucky

Repository Summary

Volume of Artifacts: 1.53 ft^3
Collection Origin: Joliet Army Ammunition Plant, Illinois; Newport Army Ammunition Plant, Indiana; Lexington-Bluegrass Army Depot, Kentucky
Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: None

Human Skeletal Remains: None

Assessment

Date of Visit: March 11, 1999

Point of Contact: Anne Bader, Staff Archaeologist

Since the 1980s the Planning Division of the U.S. Army Corps of Engineers, Louisville District has provided cultural resources management support services for a number of U.S. military installations. Presently, they curate approximately 1.53 ft^3 of archaeological material (Table 294) from cultural resource management projects on three Army Materials Command (AMC) facilities: Newport Army Ammunition Plant; Joliet Army Ammunition Plant, and Lexington-Bluegrass Army Depot, Kentucky.

Table 294.
Volume from DoD Archaeological Collections Housed at the U.S. Army Corps of Engineers, Louisville District

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Joliet Army Ammunition Plant	0.06	—
Lexington Blue Grass Army Ammunition Plant	1.41	—
Newport Army Ammunition Plant	0.06	—
Totals	1.53	—

Repository

The U.S. Army Corps of Engineers, Louisville District, Planning Division offices (hereafter Louisville District) are located on the seventh floor of the Romano Mazzoli Federal Building in Louisville, Kentucky. This federal building was constructed in the mid-1960s and is a nine-story poured concrete structure with a flat built-up asphalt roof (Figure 193). Archaeological collections currently stored by the Louisville District are held in a basement laboratory room.

Collections Storage Area

The DoD archaeological collections are being stored in a basement laboratory of the Romano Mazzoli Federal Building. This laboratory space is approximately 500 ft^2, and presently about 75% of the available storage space is being utilized. A variety of activities take place in this laboratory

Figure 193. The district's main office.

including temporary storage of artifacts, artifact washing and processing, artifact study, and materials and supplies storage . In addition, materials collected by Louisville District biologists are also maintained in this laboratory. The laboratory has poured concrete floors, concrete masonry walls, and a poured concrete ceiling. The basement, below grade, has no windows. As a federal building, office security is extremely tight. A 24-hour guard is posted at the entrance to the building and access is controlled. The basement laboratory is additionally secured with a combination key pad locking system. Environmental controls are maintained throughout the building, and consist of central air conditioning and forced-air heat. Fire protection within the basement laboratory is maintained with fire extinguishers, a sprinkler/suppression system, and fire alarms directly wired to the fire department. A pest management program is in place for the entire building, and no pest problems have been detected in the laboratory.

Artifact Storage

The artifact collections are stored on nonmovable metal shelves in two acidic boxes measuring 17 x 11 x 10 and 15.5 x12 x 3 (inches, d x w x h), and in two plastic zip-lock bags (Figure 194). None of the primary containers have been directly labeled. Within the primary containers are nested 2-mil zip-lock bags holding the artifacts. Only those secondary

Figure 194. Department of Defense archeological collections are stored in the basement archaeology laboratory.

containers holding the Lexington-Bluegrass Army Depot collections are directly labeled in marker with project, provenience, site number, and date. Adhesive notes have been placed within the secondary containers of the Joliet Army Ammunition collection with the following information: Joliet RDX, Schoolhouse, (material class). The Newport Army Ammunition collection has acidic cardstock tags with the collection I.D. placed within the secondary bags. The artifact collections encompass approximately 1.53 ft^3 (Table 295), and are sorted by site number and provenience. None have been cleaned or labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at the U.S. Army Corps of Engineers, Louisville District.

Records Storage

Associated records are located in active files in the offices of the Environmental Branch of the Louisville District Planning Division on the 7th floor of the Romano Mazzoli Federal Building. These records were not assessed because they were being used by various project leaders.

Collection Management Standards

Presently Louisville District has no comprehensive plan for curation of archaeological collections. However, investigations are underway to provide funding for curation agreements with a permanent repository.

Table 295.
Percentage by Volume of DoD Artifacts Housed at the U.S. Army Corps of Engineers, Louisville District.

Material Class	Joliet Army Ammunition Plant	Lexington Bluegrass Army Ammunition Plant	Newport Army Ammunition Plant
Lithics	0.0	45.9	0.8
Historic Ceramics	1.2	18.3	2.5
Prehistoric Ceramics	0.0	0.0	0.0
Fauna	0.0	4.6	0.0
Shell	0.0	0.0	0.0
Botanical	0.0	0.0	0.0
Flotation	0.0	0.0	0.0
Soil	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0
Brick	0.0	4.6	0.0
Metal	0.0	9.2	0.4
Glass	2.9	9.2	0.4
Textile	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total	4.1	91.8	4.1

Comments

The archaeological lab in the basement of the Romano Mazzoli Federal building provides only temporary storage for archaeological collections resulting from projects performed by Corps employees, and should not be considered a permanent repository.

Recommendations

Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

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University of Kentucky

Lexington, Kentucky

Repository Summary

Volume of Artifacts: 55.23 ft^3

Collection Origin: Eastern Kentucky Army National Guard Training Site (Artemus), Kentucky; Fort Knox, Kentucky; and Lexington-Bluegrass Army Depot, Kentucky

Compliance Status: Artifact require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 7.89 linear feet

Collection Origin: Eastern Kentucky Army National Guard Training Site (Artemus), Kentucky; Fort Campbell, Kentucky; Fort Knox, Kentucky; and Lexington-Bluegrass Army Depot, Kentucky

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: March 10, 1999

Point of Contact: Nancy O'Malley, Curator

Approximately 55.23 ft^3 of DoD artifacts and 7.89 linear feet of documentation (Table 296) are held and/or managed by staff at the University of Kentucky.

Table 296.
Volume of DoD Archaeological Collections Housed at the University of Kentucky

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Eastern Kentucky Training Site	8.33	0.59
Fort Campbell	—	0.33
Fort Knox	41.67	4.54
Kentucky National Guard	1.04	—
Lexington Blue Grass Army Ammunition Plant	4.19	2.43
Totals	55.23	7.89

Repository

Department of Defense (DoD) collections are stored in the main curation bay area of the Archaeology Building. The building is thirty years old and was originally used as a tobacco warehouse. The building has a concrete foundation, concrete block exterior walls that are faced with brick, and a built-up asphalt roof (Figure 195). The building functions as office space as well as a collections facility and processing laboratory. Artifacts and associated records are stored in the collections area.

Collections Storage Area

The collections storage area holding the DoD artifacts and records is located at the rear of the office section of the building. The floor is concrete and the interior walls are concrete block. The ceiling

Figure 195. The University of Kentucky archaeological curation repository.

is wood plank and there are no windows in the area. The area comprises about 7,000 ft^2 and is used exclusively for artifact receiving, holding, washing, and long-term storage. Records and artifacts are also studied in this area for research purposes. The area is currently at about 75% capacity and all the collections are archaeological in nature. Environmental controls for the collection room include swamp heaters. Security measures include an intrusion alarm, key locks on the doors, and controlled access. Fire protection measures consist of a sprinkler/suppression system and a fire alarm wired to the fire department. Pest management is handled by the university physical plant and service occurs on a as-needed basis, however, no evidence of infestation was noted during the assessment.

Artifact Storage

DoD artifacts are stored on nonmovable, metal shelving units (Figure 196). The collections are stored in acidic cardboard boxes that measure 17 x 12 x 9 and 12 x 12 x 12.5 (inches, d x w x h). All boxes are secured with folded flaps. Within the boxes, collections are stored either in plastic zip-lock bags or paper bags that are directly labeled with site and catalog number, provenience information, project name, date, box/bag number, and investigator. Artifacts encompass approximately 55.23 ft^3 (Table 297), and are sorted by site number and project. Artifacts have been not been cleaned and most are not directly abeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at the University of Kentucky.

Records Storage

Records from DoD projects encompass approximately 7.89 linear feet (Table 298). The records are housed in archival banker's boxes that measure 12.5 x 5 x 10 (inches, d x w x h). They are

Table 297.
Percentage by Volume of Artifacts Housed at the University of Kentucky

Material Class	Eastern Kentucky Training Site	Fort Knox	Kenbtucky National Guard	Lexington BlueGrass Army Ammunition Plant
Lithics	9.0	36.4	1.9	7.1
Historic Ceramics	0.8	11.8	0.0	0.1
Prehistoric Ceramics	0.0	0.0	0.0	0.0
Fauna	0.3	0.2	0.0	0.0
Shell	0.0	0.0	0.0	0.0
Botanical	0.0	0.0	0.0	0.0
Flotation	0.0	0.2	0.0	0.0
Soil	0.0	0.0	0.0	0.1
^{14}C	0.0	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0
Brick	0.5	0.9	0.0	0.0
Metal	2.9	12.5	0.0	0.0
Glass	1.1	13.5	0.0	0.2
Textile	0.0	0.0	0.0	0.0
Other (button, coal, and a bookcover)	0.5	0.0	0.0	0.0
Total	15.2	75.5	1.9	7.5

Table 298.
Linear Footage of DoD Associated Documentation Housed at the University of Kentucky

Materials	Eastern Kentucky Training Area	Fort Campbell	Fort Knox	Lexington Blue Grass Army Ammunition Plant
Paper	0.42	0.00	3.67	1.83
Reports	0.08	0.00	0.42	0.25
Oversized*	0.08	0.00	0.00	0.08
Audiovisual	0.00	0.00	0.00	0.00
Photographic	0.01	0.33	0.46	0.25
Computer	0.00	0.00	0.00	0.01
Total	0.59	0.33	4.54	2.43

* Includes maps and other oversized documents.

secured with a folding lid and have a typed adhesive label on the box fronts with project and county information (Figure 197). Within these containers, records are either stored loose, in paper envelopes, in accordion file folders, or in binders that are directly labeled in marker or are labeled with type-written adhesive labels. All records are in good condition.

Paper Records

Paper records comprise approximately 5.6 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection.

Report Records

Reports encompass 0.75 linear feet and are stored with other paper records.

Map Records

Maps encompass 0.16 linear feet and are stored with other paper records.

Photographs

Photographs encompass 1.05 linear feet of the collection and are stored with paper records.

Computer Records

Computer records encompass 0.01 linear feet and are stored with other paper records.

Collections Management Standards

The University of Kentucky is a long-term storage repository for archaeological collections. They currently have curation personnel and a

Figure 196. Artifact storage.

Figure 197. Associated documentation storage.

comprehensive curation plan used during the processing of all incoming archaeological materials.

Comments

1. Artifact and records are arranged by project.

2. Records are stored in the collections storage area adjacent the artifacts.

Recommendations

1. Artifacts require (a) cleaning (when applicable), (b) sorting, (c) consistent direct labeling (when applicable), (d) placement in appropriately labeled archival primary and secondary containers, and (e) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival secondary containers, (c) creation of a finding aid, and (d) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

3. Install appropriate systems to monitor and control temperature and humidity.

4. Upgrade fire detection and suppression system to include fire extinguishers and manual fire alarms.

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University of Louisville

Archaeology Program
Louisville, Kentucky

Repository Summary

Volume of Artifacts: 16.36 ft^3
Collection Origin: Fort Knox, Kentucky
Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 1.15 linear feet
Collection Origin: Fort Knox, Kentucky
Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: March 11, 1999

Point of Contact: Phil DiBlasi, Staff Archaeologist

The Program of Archaeology at the University of Louisville was established in 1968 with the primary purpose of acquiring anthropological collections, supporting anthropological research, and disseminating anthropological knowledge. As part of this mission the Program of Archaeology curates collections recovered from the Fort Knox. Approximately 16.36 ft^3 and 1.15 linear feet of Fort Knox archaeological collections and associated documentation are housed at the Program of Archaeology.

Repository

The Program in Archaeology is located in a converted truck sales and service building on the northeastern edge of the University of Louisville campus. The structure, built in the 1950's, appears to have been originally divided into two main areas, the offices and the truck service area (Figure 198). Today the office portion of the building is subdivided into offices, records storage rooms, a classroom, a field equipment storage room, a wet lab, and a human osteology collection storage room. The truck service area of the building is now the long-term collection storage area. The construction

Figure 198. Exterior of Building 34 where the Program of Archaaeology is located.

of the building is a raised concrete slab floor with concrete masonry exterior walls and steel truss construction with a metal deck and a flat built-up asphalt roof system.

Collections Storage Areas

The Fort Knox artifact collections are located in the 2,820 ft^2 artifact bay/ long-term collection storage area at the back of the curation repository. The construction of this area is very similar to the rest of the building with concrete slab floors and concrete block exterior walls. The ceiling in this storage room is constructed of particle board sheeting. Three to four sealed windows, additionally secured with steel grates, are located within this room. Access to the collection storage room is restricted. The doors are kept locked and the collection manager has the only key to the room. Activities in the collection storage area include permanent and temporary storage of artifacts, artifact conservation, artifact study, as well as loading and unloading materials via the loading dock. Collections present in the area are archaeological in nature with a small percentage of paleontological materials. The available space in this area is currently at about 50% capacity. Environmental controls for the building are minimal. Within the long-term storage area, the only environmental control is a space heater. There are no humidity controls and humidity is not monitored. In addition, the curation facility has no program for pest management, and possible evidence of spiders infestation was found in the area where the Fort Knox collections are currently stored. Fire protection within the collections storage room consists of fire extinguishers located adjacent to the exits.

Associated archaeological documentation housed at the Program in Archaeology is currently stored in the record storage room, a 125 ft^2 interior room of the building with no windows. This room is primarily utilized for archaeological records storage and study, and presently about half of the available space in this room is being utilized. Unlike the long-term collection storage area, environmental controls such as central air-conditioning and heat are available in the records storage room.

Artifact Storage

Artifacts from Fort Knox (Table 299)are stored on nonmovable metal shelving units in both archival and nonarchival boxes (Figure 199). There are four nonarchival copier paper boxes measuring 17.5 x 12 x 10 (inches, d x w x h), two nonarchival shipping boxes measuring 17 x 10 x 11.5 and 21 x 12 x 11 (inches, d x w x h), and eight archival boxes measuring 15.5 x 12.5 x 10 (inches, d x w x h). All 14 boxes are directly labeled in marker with Fort Knox, the box number, and the site numbers contained within. Within the boxes 93% of the collections are stored in 2-mil plastic zip-lock bags and 7% are stored in small telescoping lid boxes.

Table 299.
Percentage by Volume of DoD Artifacts Housed at the University of Louisville

Material Class	Fort Knox
Lithics	46.7
Historic Ceramics	23.2
Prehistoric Ceramics	1.3
Fauna	0.0
Shell	0.0
Botanical	6.4
Flotation	0.0
Soil	1.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	1.0
Metal	5.2
Glass	15.2
Textile	0.0
Other	0.0
Total	100.0

Due to puncture damage, a small percentage of the plastic bags need replacement. Except for one box, secondary containers are directly labeled in marker with the following information: project, investigator, provenience, site number, date, and description. Adhesive labels with similar information in pen have been placed on the secondary containers in the remaining box. Acidic paper tags have been placed in the secondary containers of a portion of the boxes. Some of the artifacts have been cleaned and directly labeled.

Figure 199. Long-term collection storage area with the Fort Knox collections.

Human Skeletal Remains

No DoD human skeletal remains are curated at the University of Louisville.

Records Storage

Records from Fort Knox total 1.15 linear feet (Table 300) and are stored in the records storage room in nonmovable metal filing cabinets measuring 52 x 14.5 x 36 (inches, d x h x w) (Figure 200). These filing cabinets are organized by record types; i.e. site files, associated archaeological documentation, and accession files. The larger file cabinets holding the associated archaeological documentation are arranged by county and are labeled as such, and the smaller cabinets are arranged by accession number.

Table 300.
Linear Footage of DoD Associated Documentation Housed at the University of Louisville

Materials	Fort Knox
Paper	0.60
Reports	0.54
Oversized*	0.00
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	1.15

* Includes maps and other oversized documents.

Figure 200. Interior of the records room.

Paper Records

Paper records comprise approximately 0.6 linear feet of the collection. Included in this 0.6 linear feet are field notes, laboratory/cataloging notes, bag lists, and catalog cards. Overall the condition of these paper records is fair. Accession data is available for these records, and archival paper has been introduced. However these records are kept in nonarchival manila folders and inter-office mail envelopes.

Reports

Included in the document collections for Fort Knox are copies of cultural resources reports, approximately 0.54 linear feet of the records. These reports are in good condition.

Collection Management Standards

Written policies at the Program in Archaeology exist for loan agreements, donations, treatment of human remains, acceptance, laboratory processing, and cataloging of artifact materials.

Comments

1. The Program in Archaeology is presently in the process of switching to acid-free forms and file folders for their records.

2. No environmental controls exist for the long-term artifact collection storage area.

Recommendations

1. Artifacts variously require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) creation of a finding aid, and (c) creation of an archival duplicate copy of paper records that is stored in separate, fire-safe, and secure location.

3. Initiate a program for pest management including monitoring, preventive measures, and mitigation.

4. Install appropriate systems to monitor and control temperature and humidity.

5. Upgrade fire detection and suppression system to include manual fire alarms, smoke and heat detectors, and a sprinkler/suppression system.

6. Additional security measures should be taken including the installation of an intrusion alarm system.

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University of Maine

Archaeological Research Center
Farmington, Maine

Repository Summary

Volume of Artifacts: 9.96 ft^3

Collection Origin: Hollis Training Area, Maine; Loring Air Force Base, Maine; Riley Bog Brook Training Site, Maine

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections

Linear Feet of Records: 3.71 linear feet

Collection Origin: Hollis Training Area, Maine; Loring Air Force Base, Maine; Riley Bog Brook Training Site, Maine

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: October 14, 1998

Point of Contact: Rosemary Cyr, Laboratory Manager

The University of Maine at Farmington Archaeological Research Center (ARC) was established in 1984 as a university supported contract archaeological program. Since 1991, the ARC has performed seven archaeological projects on three different Department of Defense (DoD) facilities in Maine. Approximately 9.96 ft^3 and 3.71 linear feet of DoD archaeological artifacts and associated documentation (Table 301)are housed at the archaeological research center.

Table 301.
Volume of DoD Archaeological Collections Housed at the University of Maine

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Bog Brook Army National Guard Base	3.26	0.40
Hollis Army National Guard Base	1.09	0.21
Loring Air Force Base	5.61	3.10
Totals	9.96	3.71

Repository

Two buildings are used to store the archaeological collections at ARC. The first building, located at 17 Quebec Street, is a converted house with attached barn (Figure 201). This building is used for offices, equipment storage, artifact processing and analysis, library, photography laboratory, and records storage. Exterior walls are masonite all-weather board, and the building has a standing seam metal roof. No leaks or structural problems in the roof or foundation have been noted. The second building, 7 Perkins Street, is a converted apartment building (Figure 202). DoD archaeological materials are currently stored

Figure 201. Exterior of the building that contains the laboratory and storage facilities of the Archaeological Research Center.

Figure 202. Exterior of the building that contains the offices of the Archaeological Research Center.

within the barn portion of the Quebec Street building, while the associated records are records are presently stored in field crew directors offices in both buildings. The records will be transferred to a third floor room of the Perkins Street house.

Collections Storage Area

The DoD artifact collections are housed in a large, two-story wooden barn structure with a tin roof. It is attached by an enclosed porch to offices and laboratories of the Archaeological Research Center. The interior of the building has plaster walls and wood floors. The collection storage area is approximately 960 ft^2. This building has no environmental controls. However, the building remains ventilated as a result of gaps between the wood siding of the structure. This results in comfortable ambient temperatures during the summer months and extremely cold temperatures in the winter months. The barn receives no regular janitorial services, except that provided by the curation staff. Pest management and fire detection and suppression are not major concerns, however, they are covered by the University facility management on an as-needed basis. No leaks or structural problems in the roof or foundation have been noted.

A student project is currently underway to reorganize the document storage room in the Perkins Street house. The total square footage of this room is 104 square feet, and it is expected that at completion of the reorganization the collection storage capacity of this room will reach 100%. There is one window in the document storage room, which is unsecured and has no window covering. Fire preventative measures consist of smoke detectors and fire extinguishers.

Artifact Storage

Artifacts (Table 302) are stored on nonmovable metal shelving units in nonarchival banker boxes 15 x 12.5 x 10 (inches, d x w x h). Adhesive labels are placed directly on the boxes with the following information written in marker: project, phase, year, artifact class, provenience, site, and artifact class and have been cleaned. Only distinct tools, ceramics, and artifacts to be photographed are directly labeled with site numbers, field numbers, and catalog numbers.

Human Skeletal Remains

No DoD human skeletal remains are curated at the University of Maine.

Records Storage

Records associated with the DoD projects (Table 303) are stored in three ring binders in various field crew directors' offices, however they will eventually be moved into a third floor document

Table 302.
Percentage by Volume of DoD Artifacts Housed at the University of Maine

Material Class	Bog Brook Army National Guard Base	Hollis Army National Guard Base	Loring AFB
Lithics	29.4	5.5	9.6
Historic Ceramics	0.0	0.0	0.0
Prehistoric Ceramics	0.0	0.0	3.4
Fauna	0.7	1.0	41.7
Shell	0.0	0.0	0.0
Botanical	0.0	0.0	0.0
Flotation	1.6	1.6	0.5
Soil	0.0	0.0	0.6
^{14}C	0.0	0.0	0.1
Human Skeletal	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0
Brick	0.0	0.0	0.0
Metal	0.0	2.7	0.3
Glass	1.0	0.0	0.3
Textile	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total	32.7	10.8	56.5

storage room (Figure 203) in the Perkins Street building. The records will be stored on nonmovable metal shelving units that measure 85 x 48 x 24 (inches, d x w x h). These materials, for the purpose of our visit, were placed by ARC staff into nonarchival bankers boxes measuring 18 x 10 x 12.4 (inches, d x w x h) and two mailing boxes measuring 18 x 12.5 x 3 (inches, d x w x h). None of these boxes has been directly labeled.

Paper Records

Paper records comprise approximately 2.94 linear feet. Overall the condition of the paper records is quite good, they are on acid-free paper and have security copies available.

Table 303.
Linear Footage of DoD Associated Documentation at the University of Maine

Materials	Bog Brook Army National Guard	Hollis Army National Guard	Loring AFB
Paper	0.31	0.19	2.44
Reports	0.00	0.00	0.00
Oversized*	0.00	0.00	0.17
Audiovisual	0.00	0.00	0.00
Photographic	0.08	0.02	0.50
Computer	0.00	0.00	0.00
Total	0.40	0.21	3.10

* Includes maps and other oversized documents.

Figure 203. Document storage room on the third floor of 7 Perkins Street.

Maps

Maps encompass 0.17 linear feet and are stored separate from the other records.

Photographs

Photographs encompass 0.6 linear feet of slides, black-and-white prints, contact sheets, and negatives, and are stored archivally with the paper records.

Collection Management Standards

The staff at the University of Maine, Farmington, Archaeological Research Center do not consider their facility to be a long-term curation facility. Since the majority of their archaeological projects are currently occurring in the state of Vermont, the research center is presently using the same collection management standards as the University of Vermont at Burlington.

Comments

1. There is no integrated pest management system for either building

2. No environmental controls exist for the artifact collection storage area.

3. Once associated records reorganization is complete it is believed the records storage room will reach its capacity.

Recommendations

1. When applicable, artifacts require (a) consistent direct labeling, (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. When applicable records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

Editor's Note

As of March 2000 the document reorganization project is complete. The contact at the University also noted a few reports *are* present (0.83 linear feet) for the installations noted here.

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Smithsonian Institution

Museum Support Center
Suitland, Maryland

Repository Summary

Volume of Artifacts: 85.62 ft^3

Collection Origin: Redstone Arsenal, Alabama; Fort Knox, Kentucky; Fort Leonard Wood, Missouri; Watervliet Arsenal, New York; and West Point Military Academy, New York

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear feet of Records: 0.44 linear feet

Collection Origin: Redstone Arsenal, Alabama; Marseilles Training Area, Illinois; Fort Knox, Kentucky; Fort Leonard Wood, Missouri; and Watervliet Arsenal, New York.

Compliance Status: Documentation requires partial rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: January 11-14, 1999

Point of Contact: James J. Krakker, Curator

The Smithsonian Institution Museum Support Center serves as an investigative, interpretive, and permanent curation facility for the Smithsonian Institution collections. The Museum Support Center was dedicated in 1983 and designed as a collections storage repository. Archaeological collections are curated in Pods 1 and 2, along with other collections such as Ethnology, Zoology, and Entomology. Records and archaeological and ethnology collections in the process of conservation and analysis are in the Department of Anthropology offices. Currently, the Museum Support Center has 85.62 ft^3 of artifacts and 0.44 linear feet of documentation from five DoD facilities (Table 304).

Table 304.
Volume of DoD Archaeological Collections Housed at the Smithsonian Institution Museum Support Center

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Fort Knox	6.18	0.06
Fort Leonard Wood	44.54	0.17
Redstone Arsenal	31.80	0.19
West Point Military Academy	0.87	—
Watervliet Arsenal	2.23	0.02
Totals	85.62	0.44

Repository

The Smithsonian Institution Museum Support Center is a two-story structure with four collections storage pods that have three levels within each pod (Figure 204). The Museum Support Center has an office and laboratory complex serving the Departments of Anthropology, Botany, Entomology, Mineral Sciences, Paleobiology and Zoology, the

Figure 204. The exterior of the center.

Museum of Natural History, the Smithsonian Conservation Analytical Laboratory, and the Smithsonian Oceanographic Sorting Center. It also has a library to serve these departments.

Collections Storage Areas

The pods are about 28 feet in height with insulated outer walls. Each pod is 90,000 ft^2 and is used only for collections storage. They are accessed through card-operated double metal security doors. These specially coded pass cards automatically record the user's passage. There are strategically placed motion detectors and security cameras. The walls are concrete block with a concrete floor and ceiling. There are no windows. There is central air-conditioning and central forced-air heat in each pod. Each pod has manual fire alarms that are wired into the fire department, fire extinguishers that are current in their inspections, a sprinkler/suppression system, smoke detectors, and fire walls and doors. The Museum Support Center has a program for pest management in the collections storage area. Two small dead roaches were noted on the collections storage area floor near a wall during the assessment. All fluorescent lighting has ultraviolet filters, and light switches are individually controlled at the end of each row of storage units. Pod 1 has approximately 70% archaeological collections, and Pod 2 contains approximately 10%. Overall, the collections storage is at 95% capacity.

Artifact Storage

Artifacts from DoD installations (Table 305) are curated in Pods 1 and 2 in baked enamel museum storage cabinets (Figure 205). Some of the cabinets are single units and some have two units stacked on top of each other (Figure 206). They have key locks and are locked. Some of the cabinet drawers are lined with ethafoam. Drawers are labeled with paper insert tags that have been bar-coded, and bar-coded paper labels are stored with each artifact. All artifacts have been cleaned and sorted. Most are directly labeled and recorded on a database. A copy

Table 305.
Percentage by Volume of DoD Artifacts Housed at the Smithsonian Institution Museum Support Center

Material Class	Fort Knox	Fort Leonard Wood	Redstone Arsenal	West Point Military Academy	Watervliet Arsenal
Lithics	7.2	19.6	29	1.0	2.6
Historic Ceramics	0.0	0.0	0.0	0.0	0.0
Prehistoric Ceramics	0.0	15.0	4.4	0.0	0.0
Fauna	0.0	7.4	0.0	0.0	0.0
Shell	0.0	1.1	3.1	0.0	0.0
Botanical	0.0	0.0	0.0	0.0	0.0
Flotation	0.0	0.0	0.0	0.0	0.0
Soil	0.0	0.0	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0	0.0
Worked Shell	0.0	1.1	0.1	0.0	0.0
Worked Bone	0.0	7.4	0.6	0.0	0.0
Brick	0.0	0.0	0.0	0.0	0.0
Metal	0.0	0.0	0.0	0.0	0.0
Glass	0.0	0.0	0.0	0.0	0.0
Textile	0.0	0.0	0.0	0.0	0.0
Other (coprolite and a clay plug)	0.0	0.4	0.0	0.0	0.0
Total	7.2	52.0	37.2	1.0	2.6

Figure 205. Aisles and metals shelving units in Pod 2, Level 1.

Figure 206. Metal cabinets stacked on top of each other showing drawers containing artifacts.

of the catalog database for the location of all pertinent collections was provided by the Museum Support Center.

Human Skeletal Remains

No DoD human skeletal remains are curated by the Museum Support Center.

Records Storage

Records from DoD installations total 0.44 linear feet and consist of museum catalog cards (Table 306). The room devoted to record storage measures approximately 450 ft^2. Records such as field notes and photographs are housed at the National Anthropological Archives (NAA) in the National Museum of Natural History. Some records from DoD installations were examined at the NAA, however, no building evaluation was completed for that repository due to the small amount of records available for DoD installations.

Paper Records

Paper records at the Museum Support Center encompass approximately 0.44 linear feet (0.01 were examined at the NAA). The paper records consist of a card catalog system of museum accession cards and appear to be in good condition. The records are

Table 306.
Linear Footage of DoD Associated Documentation Housed at the Smithsonian Institution Museum Support Center and National Anthropological Archives

Materials	Fort Knox	Fort Leonard Wood	Redstone Arsenal	Watervliet Arsenal
Paper	0.06	0.17	0.19	0.02
Reports	0.00	0.00	0.00	0.00
Oversized*	0.00	0.00	0.00	0.00
Audiovisual	0.00	0.00	0.00	0.00
Photographic	0.00	0.00	0.00	0.00
Computer	0.00	0.00	0.00	0.00
Total	0.06	0.17	0.19	0.02

* Includes maps and other oversized documents.

housed loose in metal file cabinets that resemble library card catalog file drawers, and are duplicated on a computer database. The records are arranged by accession number and are labeled with paper inserts that are typed with consistent and legible information.

Collection Management Standards

The Smithsonian Institution Museum Support Center and National Anthropological Archives are permanent curation facilities. The Museum Support Center has a comprehensive plan for curation.

Comments

1. No building evaluation was completed for the National Anthropological Archives.

2. The Museum Support Center meets 36 CFR Part 79 requirements.

Recommendations

1. Artifacts require placement in archival containers.

2. Records require (a) creation of an archival duplicate copy and (b) storage of the copies in a separate, fire-safe, and secure location.

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Timelines, Inc.

Littleton, Massachusetts

Repository Summary

Volume of Artifacts: 2.24 ft^3

Collection Origin: Watertown Arsenal, Massachusetts

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.28 linear feet

Collection Origin: Watertown Arsenal, Massachusetts

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: July 27, 1999

Point of Contact: Martin Dudek, Laboratory Director

Timelines is a full-service cultural resource management firm located in Littleton, Massachusetts. The staff at Timelines currently curates approximately 2.24 ft^3 of artifacts and 0.28 linear feet of documentation from Watertown Arsenal.

Repository

The building that Timelines occupies was built in the 1880s as an elastic factory. It has a concrete and stone foundation, wood-sided exterior walls, and a shingled roof (Figure 207). The building serves primarily as office and laboratory space, but has a small amount of storage space for collections as well. Department of Defense (DoD) collections are stored in the laboratory area at Timelines

Figure 207. Turn-of-the century mill that now houses the Timelines offices.

Collections Storage Area

The collections storage area is located in a portion of the laboratory area (Figure 208). The floor is wood covered with tile, interior walls are brick (on one wall only) plasterboard, and plywood. The ceiling is exposed wood trusses, and there are six windows in the area. All windows are shaded and locked. The

Figure 208. Collections storage area in the laboratory.

area used for storage of collections comprises about 50 ft^2. The area is currently at about 100% capacity and the majority of collections are archaeological in nature. Environmental controls for the collections area include radiator heat and a window air-conditioning unit. Security measures include key locks on the doors in the room, controlled access, and a padlock on the sliding metal door that is located at the bottom of the stairs leading to the Timelines office. Additionally, the facility is serviced by an alarm system that is wired to a monitoring station. Fire protection measures consist of a sprinkler/suppression system, a manual fire alarm system, and fire extinguishers located throughout the room. There is no pest management program, but there has never been any problems with infestation.

Artifact Storage

DoD artifacts are stored on immovable, metal shelving units. The collections are stored in acid-free boxes that measure 15.5 x 12.5 x 10 (inches, d x w x h). All boxes are secured with telescoping lids. Within the boxes, collections are stored in plastic, zip-lock bags that have labels directly applied to the container. All bags contain a preprinted paper insert as well. Labels list information such as site and catalog number, provenience information, project name, date, box/bag number, and investigator. Artifacts encompass approximately 2.24 ft^3 (Table 307), and are sorted by site number and project.

Table 307.
Percentage by Volume of DoD Artifacts Housed at Timelines

Material Class	Watertown Arsenal
Lithics	0.0
Historic Ceramics	22.0
Prehistoric Ceramics	0.0
Fauna	2.5
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	12.5
Metal	52.5
Glass	5.0
Textile	0.0
Other (leather, coal, and slag)	5.5
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated at Timelines, Inc.

Records Storage

Records from DoD projects encompass 0.28 linear feet (Table 308). The records are housed in the same box as the artifacts. Within this box, records are stored in manila folders that are directly labeled in pen.

Table 308.
Linear Footage of DoD Associated Documentation Housed at Timelines

Materials	Watertown Arsenal
Paper	0.18
Reports	0.10
Oversized*	0.00
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.28

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 0.18 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection.

Reports

Reports comprise approximately 0.1 linear feet.

Collections Management Standards

Timelines, Inc. is an archaeological contract firm and not a long-term curation repository. They have no comprehensive curation plan and only process the collections in order to complete the analysis portions of their projects. They are currently serving as a temporary curation repository for DoD collections.

Comments

1. Artifact and records are stored in the same primary container and are arranged by project.

2. Artifacts are in good condition.

Recommendations

1. Artifacts require (a) cleaning and (b) consistent direct labeling (when applicable).

2. Records require (a) separation from the artifact collection container, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, and (d) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

3. A permanent curation repository should be identified for the transfer and long-term care of the DoD collections that have not been designated a final repository.

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University of Massachusetts

Boston, Massachusetts

Repository Summary

Volume of Artifacts: 1.12 ft^3

Collection Origin: Hanscom Air Force Base, Massachusetts

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.75 linear feet

Collection Origin: Hanscom Air Force Base, Massachusetts

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: July 28, 1999

Point of Contact: Melody Henkel, Collections Manager

Approximately 1.12 ft^3 of artifacts and 0.75 linear feet of documentation from Hanscom Air Force Base are held and/or managed by staff at the University of Massachusetts.

Repository

Department of Defense (DoD) collections are stored in the basement of McCormick Hall on the University of Massachusetts, Boston campus. The building was built in the 1970s and has a concrete foundation, brick and concrete exterior walls, and a built-up asphalt roof (Figure 209). The building functions as office and classroom space, as well as a collections repository. Artifacts and associated records are stored in the basement collections area.

Figure 209. McCormick Hall contains all the archaeological collections.

Collections Storage Area

The collections storage area holding the DoD artifacts and records is located in the underground parking garage area of the building (Figure 210). The floor is concrete and the interior walls are concrete block. The ceiling is exposed concrete and there are

Figure 210. Collections storage.

no windows in the area. The area comprises about 600 ft^2 and is used primarily as overflow storage for the Anthropology Department and as storage for archaeological collections. The area is currently at about 90% capacity and the majority of collections are archaeological in nature. The only environmental controls for the collections area is radiator heat. Security measures include a key lock on the single door in the room and controlled access. Fire protection measures consist of a sprinkler/ suppression system and a fire alarm wired to the fire department. There is no pest management program, but there has never been a problem with infestation.

Artifact Storage

DoD artifacts are stored on nonmovable, metal shelving units. The collections are stored in acid-free boxes that measure 15.5 x 12.5 x 10 (inches, d x w x h). All boxes are secured with telescoping lids. Within the boxes, collections are stored in plastic zip-lock bags that have direct labels. In most cases a paper label is also included within the bag. Labels list information such as site and catalog number, provenience, project name, date, box/bag number, and investigator. Artifacts encompass 1.12 ft^3 (Table 310), and are sorted by site number and project.

Table 309.
Percentage by Volume of DoD Artifacts Housed at the University of Massachusetts

Material Class	Hanscom AFB
Lithics	0
Historic Ceramics	40
Prehistoric Ceramics	0
Fauna	10
Shell	5
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	20
Glass	20
Textile	5
Other	0
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at the University of Massachusetts.

Records Storage

Records from DoD projects encompass approximately 0.75 linear feet (Table 310). The records are housed in the same box as the artifacts. Within this box, records are stored in manila folders that are directly labeled in pen. All records are in good condition.

Table 310.
Linear footage of Associated Documentation at University of Massachusetts

Materials	Hanscom AFB
Paper	0.50
Reports	0.17
Oversized*	0.00
Audiovisual	0.00
Photographic	0.08
Computer	0.00
Total	0.75

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 0.5 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection.

Report Records

Reports encompass 0.17 linear feet and are stored with other paper records.

Photographs

Photographs encompass 0.08 linear feet of the collection and are stored with the paper records.

Collections Management Standards

The University of Massachusetts is currently serving as a storage repository for archaeological collection, however, they have not yet acquired adequate space for this purpose. They do have curation personnel to attend to incoming collections, but a comprehensive curation plan is still in the planning stages.

Comments

1. Artifact and records are stored in the same primary container and are arranged by project.

2. Artifacts are in good condition.

Recommendations

1. Artifacts require cleaning and labeling of the larger items.

2. Records require (a) separation from the artifact collection container, (b) removal of all contaminants, (c) packaging in appropriately labeled archival primary and secondary containers, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies in a separate, fire-safe, and secure location.

3. A permanent curation repository should be identified for the transfer and long-term care of the DoD collections.

If DoD collections are to be permanently stored at the University of Massachusetts, the following facility upgrades are recommended.

1. Initiate a program for pest management including monitoring, preventive measures, and mitigation.

2. Install appropriate systems to monitor and control temperature and humidity.

3. Upgrade fire detection and suppression system to include fire extinguishers and manual fire alarms.

4. Security measures should include the installation of an intrusion alarm system.

5. Create a comprehensive curation policy.

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Commonwealth Cultural Resources Group

Jackson, Michigan

Repository Summary

Volume of Artifacts: 20.39 ft^3

Collection Origin: Camp Grayling Army National Guard Base, Michigan

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.08 linear feet

Collection Origin: Camp Grayling Army National Guard Base, Michigan

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: August 12, 1999

Point of Contact: Mary Jakale, Collections Manager

Commonwealth Cultural Resources Group (CCRG) is located in Jackson, Michigan. CCRG houses 20.39 ft^3 of artifacts and 0.08 linear feet of documents from Camp Grayling.

Repository

Commonwealth Cultural Research Group occupies a house built as a residence in 1967. They have owned the house for ten years. It has a concrete foundation and a shingled roof. The exterior walls of this Tutor style house are stucco and timbers (Figure 211).

Figure 211. Exterior of Commonwealth's office building.

Collections Storage Area

The Camp Grayling collections are stored on the lower level of the house. This room has a suspended acoustical ceiling, paneling over sheetrock walls, and a plastic tile floor. There are four uncovered windows that do not open. The 66.5 ft^2 room is at full storage capacity. The room is used only for temporary artifact storage. Zoned central air

conditioning and heat are used to control the temperature. The door to the collections storage area has a key lock; the front door of the house is fitted with a dead-bolt lock. There is a fire extinguisher in the hall adjacent to the collections storage room, but no fire prevention or suppression devices in the storage room itself. No pest management program is in place, but CCRG staff have not reported any problems with pests.

Artifact Storage

All but approximately 0.2 ft^3 of the artifacts are packed in acidic cardboard boxes (Figure 212). The boxes have a removable lid and measure 16 x 12.5 x 10.25 (inches, d x w x h). They are labeled directly in marker with the project number, site number, and contents. Some boxes have additional labels, with information crossed out. Within the boxes, artifacts are bagged in 2-mil plastic zip-lock bags. Many of the bags are torn or punctured. In some cases, the bags are labeled directly in marker with the site number, provenience, and catalog number. Some labels are wearing away. Paper shovel test record cards, labeled with the job number, installation, site number, excavator, date, and provenience have been

Figure 212. Examination of artifacts from Camp Grayling, Michigan.

inserted into the bags. All material is sorted by material type, and none is directly labeled (Table 311). The remaining collections are in an accordion file folder stored on the table next to the artifact boxes The folder measures 3.5 x 11.75 x 9.5 (inches, d x w x h). The accordion folder has the project name and year labeled in marker. Within the folder, artifacts are bagged in 4-mil plastic zip-lock bags. Only one bag is labeled. The bag number is printed directly on the bag in pen. Shovel test record cards have also been inserted in the bags. Approximately 40% of the artifacts have been cleaned.

Table 311.
Percentage by Volume of DoD Artifacts Housed at Commonwealth Cultural Resources Group

Material Class	Camp Grayling
Lithics	5.5
Historic Ceramics	55.5
Prehistoric Ceramics	0.0
Fauna	17.5
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	0.0
Metal	7.5
Glass	11.5
Textile	0.0
Other (leather, fire cracked rock, mortar)	2.5
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated at Commonwealth Cultural Resources Group

Records Storage

Records at CCRG total 0.08 linear feet (Table 312). Some records are stored in the same accordion folder with the artifacts, as described above. The documents are in acidic manila file folders that are labeled directly in pen with the project information and contents. The condition of the folders ranges

Table 312.
Linear Footage of DoD Associated Documentation at Commonwealth Cultural Resources Group

Materials	Camp Grayling
Paper	0.08
Reports	0.00
Oversized*	0.00
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.08

* Includes maps and other oversized documents.

from fair to good, but they are bent and creased. The remainder of the records are stored in a second accordion folder that measures 1.25 x 11.75 x 9.5 (inches, d x w x h). It is labeled directly in marker with project name and year. There are no secondary containers for the records.

Paper Records

The Camp Grayling records include 0.08 linear feet of excavation paperwork and artifact inventory sheets. All records are in good condition.

Collections Management Standards

CCRG is not a long-term curation repository. They conduct archaeological fieldwork, process the artifact collections, and generally transfer all artifacts and records to another location for permanent storage.

Comments

1. The Camp Grayling collections will eventually be transferred to the state repository at the Office of the State Archaeologist for permanent curation.

2. Most artifact boxes contain an inventory of the contents.

3. Metal artifacts or other sharp materials have punctured the plastic bags.

4. Some plastic bags are overpacked.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies in a separate, fire-safe, and secure location.

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Great Lakes Research Associates

Williamston, Michigan

Repository Summary

Volume of Artifacts: 3.73 ft^3

Collection Origin: Camp Grayling Army National Guard Base, Michigan

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 1.25 linear feet

Collection Origin: Camp Grayling Army National Guard Base, Michigan

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: August 11, 1999

Point of Contact: Mark Branstner, Owner

Great Lakes Research Associates (GLRA) is located in Williamston, Michigan, about 10 miles from Lansing. GLRA houses 3.73 $feet^3$ of Department of Defense (DoD) artifacts and 1.25 linear feet of documents from Camp Grayling, a Michigan Army National Guard training facility.

Figure 213. The offices of Great Lakes Research Associates.

Repository

The GLRA office is the end unit in a row of shops in a strip shopping center (Figure 213). The office was built in the late 1970s or early 1980s. It originally served as a chiropractor's office. GLRA moved in 1993 or 1994; they currently rent the space. It has a concrete foundation, a brick facade and aluminum siding exterior walls, and a shingled roof.

Collections Storage Area

The Camp Grayling collections were on a table in the front room of the office at the time of the assessment. This room has a suspended acoustical ceiling, wallboard walls, and a carpeted tile floor. There are two windows that are covered with blinds. The windows do not open. The 140 ft^2 room is at

100% storage capacity. Central air-conditioning and heat are used to control the temperature. The front door is fitted with a dead-bolt lock. There are no fire prevention or suppression devices of any kind in the collections storage area. No pest management program is in place. GLRA staff have not reported any problem with pests in the office. There are noticeable signs of the presence of pests and animals among the collections, however. Dead insects were found on the side of one box, and black cat hair could be seen on the lids of all the boxes containing the Camp Grayling collections.

Figure 214. Collections from Camp Grayling, Michigan.

Artifact Storage

The Camp Grayling artifacts (Table 313) are packed in three acidic cardboard boxes and placed on top of a table for this assessment (Figure 214). Two of the boxes are labeled directly in marker with the project information and contents. One box has an adhesive label with the same information printed in marker. Each box measures 16.5 x 12.5 x 10.5 (inches, d x w x h). Artifacts are bagged in plastic zip-lock bags. The bags in two boxes are labeled directly in marker with the site number, provenience, project, date, investigator, and contents; the bags from the other box are labeled with a piece of paper taped to the front with same information printed in marker. Approximately 85% of the artifacts have been washed. All material is sorted by material type; none is labeled.

Table 313.
Percentage by Volume of DoD Artifacts Housed at Great Lakes Research Associates

Material Class	Camp Grayling
Lithics	14
Historic Ceramics	20
Prehistoric Ceramics	1
Fauna	5
Shell	0
Botanical	1
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	3
Metal	25
Glass	30
Textile	0
Other (buttons, plastic, leather)	1
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at Great Lakes Research Associates.

Records Storage

The records are packed in one acidic cardboard box (Table 314). The box has a telescoping lid and measures 16.75 x12.5 x 10.25 (inches, d x w x h). It is labeled directly in marker with the project information and contents. The box is on the table next to the artifact boxes. All records are packaged in acidic, manila file folders. The folders are labeled directly in pen with the site location, project information, and contents. The condition of the folders ranges from fair to good. Contaminants, such as paper clips, were noted in the collection.

Table 314.
Linear Footage of DoD Associated Documentation Housed at Great Lakes Research Associates

Materials	Camp Grayling
Paper	0.27
Reports	0.00
Oversized*	0.98
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	1.25

* Includes maps and other oversized documents.

Paper Records

The Camp Grayling records include 0.04 linear feet of site file data, 0.08 linear feet of field notes, and 0.15 linear feet of analysis paperwork.

Maps

Maps encompassing approximately 0.98 linear feet are present in the Camp Grayling documentation. The maps are folded to fit into the folders. They are filed by provenience, specifically, township and range.

Collections Management Standards

GLRA is not a long-term curation repository. They conduct archaeological fieldwork, process the artifact collections, and generally transfer all artifacts and records to another location for permanent storage.

Comments

1. The office cat has free reign of the collections storage area, both when staff members are present and after everyone has gone home for the night. The cat jumped onto the artifact and records boxes during the assessment.

2. GLRA does not intend to keep the Camp Grayling collections in perpetuity, but they have not yet found a curation repository. Michigan State University and Michigan Office of the State Archaeologist are possible final storage repositories; collections from past GLRA projects are curated at these repositories.

3. Records contain paper clips.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable, (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) create a finding aid, (c) packaging in appropriately labeled archival primary and secondary containers, (d) placement of maps in an archival flat file, and (e) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

3. Identify a permanent repository (ies) for the transfer of the DoD archaeological collections.

4. Initiate a program for pest management including monitoring, preventative measures, and mitigation.

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Bureau of Michigan History

Office of the State Archaeologist
Lansing, Michigan

Repository Summary

Volume of Artifacts: 2.17 ft^3

Collection Origin: Camp Grayling, Michigan; K.I. Sawyer Air Force Base, Michigan; Wurtsmith Air Force Base, Michigan

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.93 linear feet

Collection Origin: Camp Grayling, Michigan; K.I. Sawyer Air Force Base, Michigan; Wurtsmith Air Force Base, Michigan

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: August 10, 1999

Point of Contact: Barbara Mead, Assistant State Archaeologist and Collections Manager

The Bureau of Michigan History, Office of the State Archaeologist, is located in Lansing, Michigan, and serves as a permanent repository for collections from Michigan. The repository has archaeological collections from Camp Grayling, K.I. Sawyer Air Force Base, and Wurtsmith Air Force Base, consisting of approximately 2.17 ft^3 of archaeological materials and 0.93 linear feet of associated documentation (Table 315).

Table 315.
Volume of DoD Archaeological Collections Housed at the Bureau of Michigan History

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Camp Grayling	0.003	0.01
K. I. Sawyer AFB	1.83	0.51
Wurtsmith AFB	0.34	0.41
Totals	2.173	0.93

Repository

The building in which the Bureau of Michigan History, Office of the State Archaeologist is located, is divided into two parts; a library and a museum, and was constructed in 1989. The metal frame building has masonry walls with exterior veneers of sandstone and copper. The built-up roof is constructed of metal trusses, corrugated metal decking, concrete slabs, flat rubber membrane (EPDM), and gravel. Archaeological collections are located in a locked room on the fourth floor of the museum. Security measures for the building include TV cameras at all entrances and keycards for access to any restricted area. Although motion detectors have been installed and are centrally monitored, the detectors are not used because the building is heavily used. The heating, ventilation, and air conditioning

system is zoned for climate control and fire detection. Regulated air is supplied by air handlers with variable air volume and piped to the repository from an adjacent state building. The boiler house is located in another nearby building. Humidity controls are present and relative humidity can also be adjusted. Two independent and alternatively operated electrical systems provide power. The fire detection and suppression systems include smoke sensors that are located in return air ducts, ceiling, and sprinkler heads. Heat sensors are also present. Both automatic and manual-pull alarm systems exist and are wired to and monitored by the local fire department. Type A, B, and C fire extinguishers are regularly checked and are located throughout the building. Several types of sprinkler heads are mounted at different locations within the building, including a wet-pipe, pre-action, single interlock type. The wet pipe system releases a sprinkler cap at 140° F. Smoke then triggers the charge of water, with water discharging at 165° F. Isolated stairwells are present for emergency evacuation. Emergency lighting is installed throughout the interior with exits marked by illuminated signs.

Collections Storage Areas

Archaeological collections are located in a locked room (Room M404) on the fourth floor of the museum. The room measures approximately 1,400 ft^2. Artifact processing and washing occur in the room. Field and diving equipment are also stored in the room. A digital relative humidity and temperature monitor is present. Fluorescent bulbs are filtered. A biodegradable insecticide is applied yearly. Eating and drinking are not permitted in the room. Collections are located on adjustable metal shelves located against the walls or in metal drawers inside stationary steel cabinets. Artifacts are arranged by county in the cabinets (Figure 215).

Figure 215. Storage cabinets with one drawer exposed containing Wurtsmith AFB, Michigan, artifacts.

Table 316.
Percentage by Volume of DoD Artifacts Housed at the Bureau of Michigan History

Material Class	Camp Grayling	K.I. Sawyer AFB	Wurtsmith AFB
Lithics	0.1	1.7	14.2
Historic Ceramics	0.0	25.2	0.0
Prehistoric Ceramics	0.0	1.7	0.0
Fauna	0.0	2.5	0.3
Shell	0.0	0.0	0.0
Botanical	0.0	2.5	0.0
Flotation	0.0	0.0	0.0
Soil	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0
Brick	0.0	2.5	0.0
Metal	0.0	21.9	0.0
Glass	0.0	25.2	0.8
Textile	0.0	0.8	0.0
Other (leather)	0.0	0.0	0.6
Total	0.1	84.0	15.9

Artifact Storage

Storage units with DoD artifacts (Table 316) consist of immovable, steel, two-door, two-sided cabinets 30 x 57.5 x 78 (inches, d x w x h) with a variable number (e.g., 17) of pullout drawers 29.5 x 26 x 1.5 (inches, d x w x h) per side (Figure 216). Each cabinet is labeled with a paper insert located in a metal holder on one door, whereas the other door has a Post-it note stuck to the exterior. Each drawer is labeled with a paper insert located in a holder. Acidic artifact boxes of varying size (e.g. 2 x 3 x 0.75 inches, d x w x h or 6.75 x 9 x 3.25 inches, d x w x h) with two metal tabs on each side to hold the top in place, occur in each drawer. Metal artifacts are stored loose in a drawer resting on foam padding. The boxes have adhesive labels with typed information or are directly labeled in marker. Some boxes contain index cards or pieces of paper with provenience information. Artifacts in the boxes are loose, contained in zip-lock plastic bags (2-mil), or

Figure 216. Drawer containing artifacts from K. I. Sawyer AFB, Michigan.

are contained in a glassine envelope. Artifacts that are stored loose rest on bubble wrap that is layered throughout the box forming an artifact/bubble wrap, multi-layered "sandwich." Each layer has a different material class. For the secondary containers that are labeled, the labels are directly applied and written in pen. Information on these bags includes the site number. All artifacts are clean and a variable quantity, 50%-100%, are labeled. Labels are directly applied in India ink with/without white out or, are attached to an artifact with string. The labels are not always legible.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Bureau of Michigan History.

Records Storage

Records from Camp Grayling, K.I. Sawyer Air Force Base, and Wurtsmith Air Force Base, (Table 317), are present. The storage units consists of two metal file cabinets 28.5 x 17.75 x 52 or 28 x 13.75 x 29 (inches, d x w x h); one has a key lock for the entire cabinet (Figure 217). Labels on the drawers consist of paper inserts written in marker. Secondary containers consist of archival manila folders and nonarchival accordion files. Labels on the secondary containers, when present, are direct or adhesive, with information written in pencil or typed. Label information is inconsistent, but legible. The records are in fair to good condition. Contaminates include paper clips. A duplicate copy of the records does not exist. A database of associated documents exists and copies of the database are maintained.

Table 317.
Linear Footage of DoD Associated Documentation Housed at the Bureau of Michigan History

Materials	Camp Grayling	K. I. Sawyer AFB	Wurtsmith AFB
Paper	0.01	0.26	0.41
Reports	0.00	0.00	0.00
Oversized*	0.00	0.00	0.00
Audiovisual	0.00	0.00	0.00
Photographic	0.00	0.26	0.00
Computer	0.00	0.00	0.00
Total	0.01	0.51	0.41

* Includes maps and other oversized documents.

Figure 217. Filing cabinet drawer containing records for multiple collections.

Paper Records

Paper records comprise approximately 0.68 linear feet and consist of administrative, excavation, and analysis information.

Photographs

Photographs measure 0.26 linear feet. Photographic records include black-and-white prints, black-and-white negatives, color prints, and color slides.

Collections Management Standards

The Bureau of Michigan History, Office of the State Archaeologist, is a permanent curation facility with written policies for the minimum standards of acceptance, archive management, accessioning, cataloging, database entry, loans, exhibits, conservation, collections access, security, pest management, and deaccessioning (1989).

Comments

The Bureau of Michigan History, Office of the State Archaeologist, may receive other collections from DoD installations that are currently being held by private archaeological contractors, such as Camp Grayling collections held at Commonwealth Cultural Resources Group, Jackson, Michigan. However, the transfer of these collections is not imminent.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, (c) insertion of acid-free labels in each secondary container, and (d) for metal artifacts, preliminary conservation treatment.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives to be stored in a separate, fire-safe, and secure location.

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Southwest Missouri State University

Center For Archaeological Research
Springfield, Missouri

Repository Summary

Volume of Artifacts: 0.19 ft^3

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Artifacts require partial rehabilitation to comply with federal guidelines and standards for collections.

Linear Feet of Records: 0.15 linear feet

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Documentation requires partial rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: September 24, 1998

Point of Contact: Dr. Neil Lopinot, Director

The Center for Archaeological Research (CAR) is located in a commercial strip within the perimeter of Southwest Missouri State University. The mission of CAR is to promote archaeology in Missouri. Subsequent to the DoD assessment team visit, in 1999, St. Louis District personnel visited CAR for another project that involved a more detailed repository evaluation (St. Louis District, in press). Information on the repository and its infrastructure are taken from the data generated by the current and subsequent visits, while the artifact and record storage information was compiled by the DoD assessment team in 1998. Collections from one DoD facility, Fort Leonard Wood, 0.19 cubic feet of archaeological materials and 0.15 linear feet of records, are stored at CAR.

Repository

CAR occupies a building constructed in the 1950s that was originally used for private business (Figure 218). In 1996, a higher floor level was renovated and connected via a door and stairs. The building is concrete and brick, and has a corrugated metal roof that is capped with tar. The building has

Figure 218. The exterior and main entrance to the building that contains the Center for Archaeological Research.

about 4,500 ft^2 of space which is divided into the collections area, laboratory and processing areas, and record storage. Offices are located in these three areas as well.

Collections Storage Areas

Artifacts and records are stored in two different areas. However, the security, fire prevention and detection, environmental controls, and pest management procedures are similar for both. Additionally, the overall architecture is as described above. The artifact collection area is approximately 1,200 ft^2 and includes space saving movable metal shelving units for artifact storage, offices, a bathroom, and a workroom. The records storage area, between 500–600 ft^2, also includes office space. Records are variously stored on shelving units, in file cabinets, or in boxes (described below). Building security begins with an intrusion alarm system that is monitored by the police substation a block away. Additionally, there are dead-bolt and key locks at the main entrance along with an access card system. Motion detectors are mounted throughout the facility. The numerous windows are safety glass, and they do not open. However, they are not covered. CAR has both heating and cooling, but no humidity control. Humidity is not monitored. Fire detection and suppression consists of a few smoke detectors, a fire rated door into the artifact storage area, and numerous fire extinguishers placed at easily accessed locations. These are regularly checked and updated. Pests are not monitored, but the building is sprayed with pesticide once per month by university personnel. The assessment team saw no signs of infestation.

Figure 219. The long-term, movable, metal storage units.

Table 318.
Percentage by Volume of DoD Artifacts Housed at Southwest Missouri State University

Material Class	Fort Leonard Wood
Lithics	100
Historic Ceramics	0
Prehistoric Ceramics	0
Fauna	0
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	0
Glass	0
Textile	0
Other	0
Total	100

Artifact Storage

Long-term collections storage is on custom-made movable steel shelves. These units have no mechanical devices to aid movement (Figure 219). There are 13 movable units, each is three shelves long and six high. At the time of the assessment teams visit, the DoD collection was stored within one acidic cardboard boxes measuring 5.5 x 5.5 x 5.5 (inches, d x w x h). They were folded and taped with taped folding flaps for security. A stamp requesting CAR and site number, date, project, team, and sponsor is on each box. A marker was used to fill in this information. The secondary 4-mil plastic zip-lock bags have paper inserts. In marker, these record the site number, provenience, date, CAR number and investigator. All artifacts (Table 318) were cleaned, sorted, and directly labeled with site number.

Human Skeletal Remains

No DoD human skeletal remains are curated at Center for Archaeological Research.

Records Storage

Original DoD records consist of paper records and reports that total 0.16 linear feet (Table 319). Two reports are stored on wooden shelving units in archival cardboard report holders. A typed adhesive label on the outside of the box has the reference CAR number. The remaining documentation is located within a file cabinet or in a box stacked on the metal, letter sized, file cabinet. A typed insert on the file cabinet records the CAR numbers within each drawer. Within the file cabinet and box, the DoD material, all paper documents, is located in labeled manila folders. An acidic box (24.75 x 12.5 x 10.5, inches, d x w x h) holds the remainder of the paper records. The box is folded and taped and has a folded flap top. The outside of the box was labeled in marker with the range of CAR numbers.

Table 319.
Linear Footage of DoD Associated Documentation Housed at Center for Archaeological Research

Materials	Fort Leonard Wood
Paper	0.06
Reports	0.06
Oversized*	0.03
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.15

* Includes maps and other oversized documents.

Paper

Paper material comprises 0.06 linear feet of the DoD record collections at CAR It consists of survey, excavation, and administrative records that are located within the file cabinet drawer and box.

Reports

Two report copies are located in the collections and total 0.06 linear feet. Copies of these reports are stored at an off site location.

Maps

Maps total 0.03 linear feet in the collections.

Collections Management Standards

The Center for Archaeological Research currently serves as a long-term curation facility and as such, it possesses written policies for artifact packaging, labeling, and washing.

Comments

Artifacts and records are in good condition, but require additional rehabilitation.

Recommendations

1. Artifacts require (a) bagging in appropriately labeled archival primary and secondary containers and (b) insertion of acid-free labels in each secondary container.

2. Paper records require (a) packaging in appropriately labeled archival primary and secondary containers.

3. Install an appropriate system to monitor and control humidity.

Editor's Note

As of March 2000 the collection has been rehabilitated.

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University of Missouri-Columbia

Columbia, Missouri

Repository Summary

Volume of Artifacts: 116.32 ft^3

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 9.21 linear feet

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: 8.05 ft^3

Collection Origin: Fort Leonard Wood, Missouri

Compliance Status: Human skeletal remains are in good condition and have been inventoried for NAGPRA compliance purposes.

Assessment

Date of Visit: July 12–13, 1999

Point of Contact: James Cogswell, Collections Manager

Approximately 116.32 ft^3 of Department of Defense (DoD) artifacts, 9.21 linear feet of documentation, and 8.05 ft^2 of human remains from Fort Leonard Wood are held and/or managed by staff at the University of Missouri.

Repository

Department of Defense collections are stored in the main curation bay area of the Museum Support Center. The building is five years old and was built specifically as a curation repository. The building has a concrete foundation, metal exterior walls, and a metal roof (Figure 220). The building functions as office space as well as a collections repository and processing laboratory. Artifacts are stored the collections area and associated records are stored in a separate archives room.

Figure 220. The Museum Support Center contains all the archaeological collections at the university.

Collections Storage Areas

The collections storage area holding the DoD artifacts and records is located at the rear of the offices section of the building. The floor is concrete and the interior walls are plasterboard. The ceiling is exposed metal beams and insulation, and there are no windows in the area. The area comprises about 20,000 ft^2 and is used exclusively for artifact receiving, holding, washing, and long-term storage. Artifacts are also studied in this area for research purposes. The area is currently at about 60% of capacity and the majority of collections are archaeological in nature. Environmental controls for the artifact room includes central air-conditioning and heat, ceiling fans for air circulation, temperature and humidity monitoring and control. Security measures include an intrusion alarm wired directly to university police, key locks on the doors, motion detectors, campus security, and controlled access. Fire protection measures consist of a sprinkler/suppression system, a fire alarm wired to the fire department, heat sensors, and fire extinguishers. The University physical plant personnel handle pest management and service occurs on an as-needed basis, however, no evidence of infestation was noted during the assessment.

Artifact Storage

DoD artifacts are stored on nonmovable, metal shelving units (Figure 221). The collections are stored in acidic cardboard boxes that measure 15.5 x 10.5 x 9.5 (inches, d x w x h). All boxes are secured with telescoping lids. Within the boxes, collections are stored either in plastic zip-lock bags or small cardboard boxes that are labeled using a computer generated label that is inserted into a plastic sleeve and then adhered to the top of the box or bag. Labels list information such as site and catalog number, provenience information, project name, date, box/bag number, and investigator. Artifacts encompassing approximately 116 ft^3 (Table 320) are sorted by site number and project.

Human Skeletal Remains

Human remains from Fort Leonard Wood are stored in the same manner as the rest of the collection, but are kept in a different portion of the collections area. All human remains are stored only in acid-free boxes and plastic bags and have been inventoried for NAGPRA purposes (St. Louis District 1995, 1996).

Figure 221. Collections storage.

Table 320.
Percentage by Volume of DoD Artifacts Housed at the University of Missouri-Columbia

Material Class	Fort Leonard Wood
Lithics	45.9
Historic Ceramics	2.2
Prehistoric Ceramics	9.0
Fauna	12.9
Shell	2.0
Botanical	2.0
Flotation	0.5
Soil	14.9
^{14}C	3.4
Human Skeletal	1.4
Worked Shell	0.0
Worked Bone	0.0
Brick	0.1
Metal	2.4
Glass	3.3
Textile	0.0
Other	0.0
Total	100.0

Records Storage

Records from DoD projects encompass approximately 9.2 linear feet (Table 321). The records are housed in archival boxes (Figure 222). They are secured with a folding lid and have a typed

Table 321.
Linear Footage of DoD Associated Documentation Housed at University of Missouri-Columbia

Materials	Fort Leonard Wood
Paper	6.92
Reports	1.13
Oversized*	0.13
Audiovisual	0.00
Photographic	1.04
Computer	0.00
Total	9.21

* Includes maps and other oversized documents.

adhesive label on the box fronts with project and county information on them. Within these containers records are either stored loose, in paper envelopes, accordion file folders, or binders that are directly labeled in marker or labeled with type- written adhesive labels. All records are in good condition.

Paper Records

Paper records comprise approximately 6.9 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection.

Reports

Reports encompass approximately 1.1 linear feet and are stored with other paper records.

Photographs

Photographs encompass 1.04 linear feet of the collection and are stored with paper records.

Maps

Maps encompass approximately 0.13 linear feet and are stored with other paper records.

Collections Management Standards

The University of Missouri is a long-term storage repository for archaeological collections. They currently have curation personnel and a comprehensive curation plan that they adhere to during for the processing of all incoming archaeological materials (American Archaeology Division 1991).

Figure 222. Records are stored in archival boxes on immovable shelves.

Comments

1. Artifact and records are arranged by project.

2. Artifacts are in good condition, but require some cleaning and processing.

3. Records are stored in a specific archives room that is adjacent to the collections storage area.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) creation of a finding aid, (c) packaging in appropriately labeled archival secondary containers, (d) placement of maps in an archival flat file, (e) creation of a archival duplicate copy of paper records (for those records not previously microfiched), and (f) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

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University of Missouri-St. Louis

St. Louis, Missouri

Repository Summary

Volume of Artifacts: 4.2 ft^3

Collection Origin: Jefferson Barracks, Missouri

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.44 linear feet

Collection Origin: Jefferson Barracks, Missouri

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: September 1, 1999

Point of Contact: Tim Baumann, Archaeologist

From 1989 to 1993 archaeologist from the University of Missouri, St. Louis, have performed a number of cultural resources projects on Jefferson Barracks in St. Louis, Missouri. The Department of Anthropology at the University of Missouri, St. Louis, stores artifact and record collections produced as a result of these projects. Approximately 4.2 ft^3 and 0.44 linear feet of Jefferson Barracks' artifacts and associated documentation comprise the collections.

Repository

The Department of Anthropology's archaeology laboratory is located in the Mt. Providence Building, a former Catholic grade school, located on the northern edge of the University of Missouri, St. Louis campus (Figure 223). This 1930s structure is a brick multi-storied building with a concrete foundation and slate shingled roof. Numerous wing additions were added to the building until the 1960s. The archaeological laboratory and collection storage

Figure 223. The exterior of the Mt. Providence Building where the archaeological laboratory and storage rooms are located.

room are located in ground level rooms in both a 1930s and 1960s wings of the building.

Collections Storage Areas

The Jefferson Barracks archaeological collections are stored on nonmovable metal shelving units in a 960 ft^2 collection room, located on the ground level of a 1930s wing of the Mt. Providence Building (Figure 224). The construction of this room is similar to the rest of the wing with linoleum tile flooring, glazed ceramic tile and plaster interior walls, and a suspended acoustical tile ceiling. Within this room there are six windows that are locked covered with venetian blinds. Access to the collection storage room is limited. There is one door to the room that is kept locked. Activities within the collection storage area include the storage of the archaeological collections, as well as storage of art

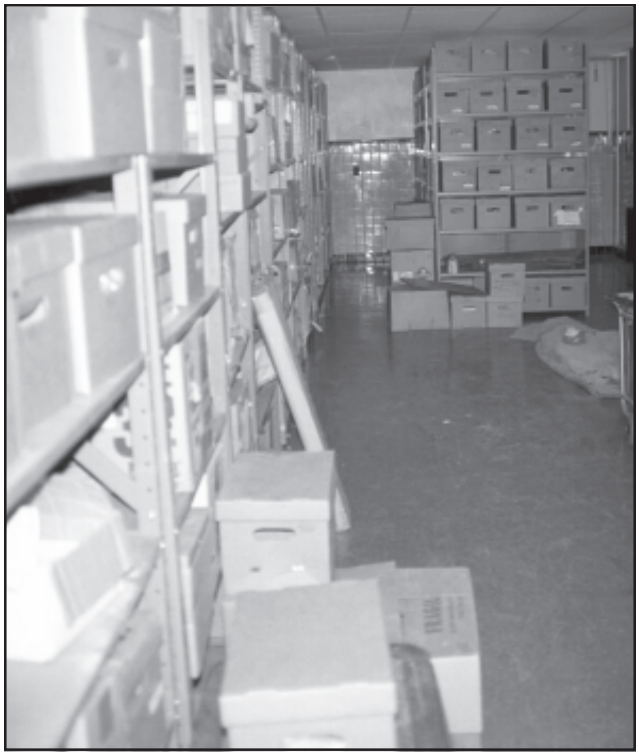

Figure 224. The collection storage room is located on the ground floor.

materials and supplies. Currently the collection storage room is filled to capacity with collections. Environmental controls are maintained by radiant heat and window air conditioning units.

Records are stored in the archaeology laboratory adjacent to the collection storage room. The laboratory is located in an 1,100 ft^2 room in a 1960s wing of the Mt. Providence Building. The interior of this room has plaster and ceramic glazed concrete block walls, linoleum tile floors, and suspended acoustical tile ceiling. One wall of the room is lined with exterior windows, which are kept locked and covered with curtains. The room's central heating and air conditioning, which is controlled by an individual room register unit, maintains the environment of the room. In both collection areas, fire protection measures have not been taken, and there a no regularly maintained pest management program. Signs of insect infestation have been reported in the building, including dead cockroaches in the artifact collection storage room.

Artifact Storage

Artifacts from Jefferson Barracks (Table 322) are stored on nonmovable metal shelving units measuring 23.5 x 49 x 86 (inches, d x w x h). Three cardboard boxes, one archival and two nonarchival, hold the artifact collections. These boxes vary in dimension. The archival box is directly labeled in marker with "SL," which represents St. Louis County. The two nonarchival boxes have acidic paper taped to their exteriors with the following marker written information: box number, site number, catalog number, and project name. The two non-archival boxes show signs of compression damage. Paper bags are used as secondary containers

Table 322.
Percentage by Volume of DoD Artifacts Housed at University of Missouri, St. Louis

Material Class	Jefferson Barracks
Lithics	33.2
Historic Ceramics	26.6
Prehistoric Ceramics	0.0
Fauna	1.7
Shell	0.0
Botanical	1.7
Flotation	0.0
Soil	0.0
^{14}C	1.7
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	1.7
Metal	11.7
Glass	20.0
Textile	0.0
Other (clinkers)	1.7
Total	100.0

for 97% of the collection. These bags are directly labeled in marker with site numbers, provenience, project name, box number, and catalog number. Within these paper bags artifacts are individually wrapped in less then 2-mil plastic bags closed by twist-ties. The remaining 3% of secondary containers are small 2-mil zip-lock bags directly labeled with site number, provenience, site name, project, date, catalog number, and bag number. All artifacts have been thoroughly cleaned, and none are directly labeled. Nonarchival cardstock with catalog number, site number, project name, provenience, material class number, and catalog number are place with these objects.

Human Skeletal Remains

No DoD human skeletal remains are curated at the University of Missouri-St. Louis.

Records Storage

The Jefferson Barracks associated archaeological documentation (Table 323) is currently housed in the archaeology laboratory adjacent to the collection storage room. They are stored in three drawers of two metal five-drawer filing cabinets, each measuring 25 x 15 x 60 (inches, d x w x h) (Figure 225). The drawers are labeled with adhesive notes with the following information written in marker: Reports 91–105; Reports 151–165; and Reports 166–180. The documentation is stored in acidic manila folders directly labeled in pencil. These folders are worn. Copies of the associated documentation, as well as accession catalog cards and slides, are also kept on file in the main office of the Anthropology Department. It not known if these copies have been placed on acid-free paper.

Table 323.
Linear Footage of DoD Associated Documentation at the University of Missouri, St. Louis

Materials	Jefferson Barracks
Paper	0.33
Reports	0.08
Oversized*	0.00
Audiovisual	0.00
Photographic	0.02
Computer	0.00
Total	0.44

* Includes maps and other oversized documents.

Figure 225. The associated documentation storage is located in the archaeological laboratory.

Paper Records

Paper records comprise approximately 0.33 linear feet of the collection. Included are administrative records, excavation records, and repository accession cards. The condition of these paper records are good, however, they have not been archivally processed. Contaminants such as staples and binding clips are found within the collection.

Reports

Reports represented approximately 0.08 linear feet of the records.

Photographs

Photographic materials encompass 0.02 linear feet, which are three sleeves of slides stored in a filing cabinet in the main office of the Anthropology Department. These materials have been placed in archive quality hanging sleeves.

Collection Management Standards

University of Missouri, St. Louis, follows the collection management standards put forth by the

University of Missouri, Columbia, and the Illinois State Museum. They also have procedures in place for assigning catalog numbers and de-accessioning of their collections.

Comments

1. The present archaeological collection repository at the University of Missouri, St. Louis is scheduled to be torn down in the year 2000. Arrangements are being made to move the collections to a better equipped collection storage space on the main campus of the university, but at the time of the assessment, no space had been determined.

2. Topographic and other assorted maps utilized by the University of Missouri, St. Louis while performing cultural resources projects on Jefferson Barracks could not be located.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) bagging in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, and (d) confirmation that the duplicate copy of paper records are on acid-free paper and stored in a separate, fire-safe, and secure location.

3. Initiate a program for pest management including monitoring, preventive measures, and mitigation.

4. Install appropriate systems to monitor and control and humidity.

5. Install a fire detection and suppression system to include fire extinguishers, manual fire alarms, smoke and heat detectors, and a sprinkler/suppression system.

6. Additional security measures should be include the installation of an intrusion alarm system.

Editor's Note

As of March 2000 some additional maps (0.1 linear feet) and photographs (0.2 linear feet) have been located by University staff. Also, collections will be moved to another facility in Spring of 2000.

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Washington University

Department of Anthropology
St. Louis, Missouri

Repository Summary

Volume of Artifacts: 2.14 ft^3

Collection Origin: Jefferson Barracks, Missouri

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.02 linear feet

Collection Origin: Jefferson Barracks, Missouri

Compliance Status: Documentation requires partial rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: September 1, 1999

Points of Contact: Dr. David Browman, Department Chair and Angela Gordon, graduate student.

In 1995 a graduate student in archaeology at Washington University performed a cultural resources project on Jefferson Barracks. Currently, the only DoD materials housed at the Department of Anthropology at Washington University are the artifacts (2.14 ft^3) and records (0.02 linear feet) produced from this project.

Repository

The Department of Anthropology is located in McMillan Hall, a former women's dormitory on the campus of Washington University (Figure 226). This 1906 structure is a red granite three-story building with a concrete foundation and slate tile and rubber membrane roof. Today the building contains office, laboratory, and classroom space for the Department of Anthropology, Afro-American Studies, the journal *American Anthropologist*, and the Committee on Social Thought and Analysis. The DoD archaeological collections are located in the archaeological laboratory, which is on the first floor in a room in the eastern wing of the building.

Figure 226. The exterior of McMillan Hall where the archaeology laboratory is located.

Collections Storage Area

The Jefferson Barracks archaeological collections and associated documentation are located in an approximately 650 ft^2 "L" shaped laboratory room in McMillan Hall. The construction of this room is similar to the rest of the wing with linoleum tiles over concrete and ash flooring, plaster interior walls, and a suspended acoustical ceiling. Windows line two of the walls, and they are covered with venetian blinds and secured with locks. Access to the collection storage room is limited, and the entrance to the room has both a key and dead-bolt locking system. Activities within the archaeological laboratory include the processing of archaeological collections, storage of both archaeological collections and associated documentation, storage of materials and supplies, study areas, and office space. Currently the collection storage archaeological laboratory is filled to capacity. Environmental controls are maintained by radiant steam heat and central air-conditioning. The only fire protection measure are fire extinguishers. The pest management program for the building consists of spraying quarterly and as-needed. However, insect have been reported in the basement

Artifact Storage

Artifacts from Jefferson Barracks are stored on nonmovable wall-mounted shelves in two acidic cardboard boxes measuring 15 x 10.5 x 12 and 12 x 12.5 x 12 (inches, d x w x h). Both boxes are directly labeled in marker with "Jefferson Barracks". Additionally one of the boxes is also labeled with an accession number. Within the two primary containers, 20% of the collection is in 4-mil zip-lock bags, 30% is in nonarchival paper bags, and 50% is in nonarchival boxes. Nested within the nonarchival secondary boxes, artifacts have been placed in 2-mil plastic zip-lock bags. The secondary and tertiary bags have been directly labeled in marker or pen with site name, provenience, investigator, and date. Placed within the tertiary 2-mil plastic bags are nonarchival paper tags containing the following information: material class, provenience, date and project. The artifacts are not washed, sorted, or directly labeled. Table 324 documents the different material classes present and their percentage of the total volume.

Table 324.
Percentage by Volume of DoD Artifacts Housed at Washington University

Material Class	Jefferson Barracks
Lithics	0
Historic Ceramics	5
Prehistoric Ceramics	0
Fauna	5
Shell	0
Botanical	0
Flotation	5
Soil	0
^{14}C	5
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	50
Metal	20
Glass	10
Textile	0
Other	0
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at Washington University.

Records Storage

Records from Jefferson Barracks (Table 325) are stored in one drawer of a metal five-drawer filing cabinet, measuring 25 x 15 x 52 (inches, d x w x h) (Figure 227). Within the drawers, documents are stored in acidic manila folders which are directly labeled in pen and organized chronologically. The specific label of the file containing materials from the Jefferson Barracks project is as follows, "95-2480 Jeff. Barracks," which represents the year, accession number, and project name. The folder is in good condition.

Table 325.
Linear Footage of DoD Associated Documentation Housed at Washington University

Materials	Linear Footage
Paper	0.00
Reports	0.02
Oversized*	0.00
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.02

* Includes maps and other oversized documents.

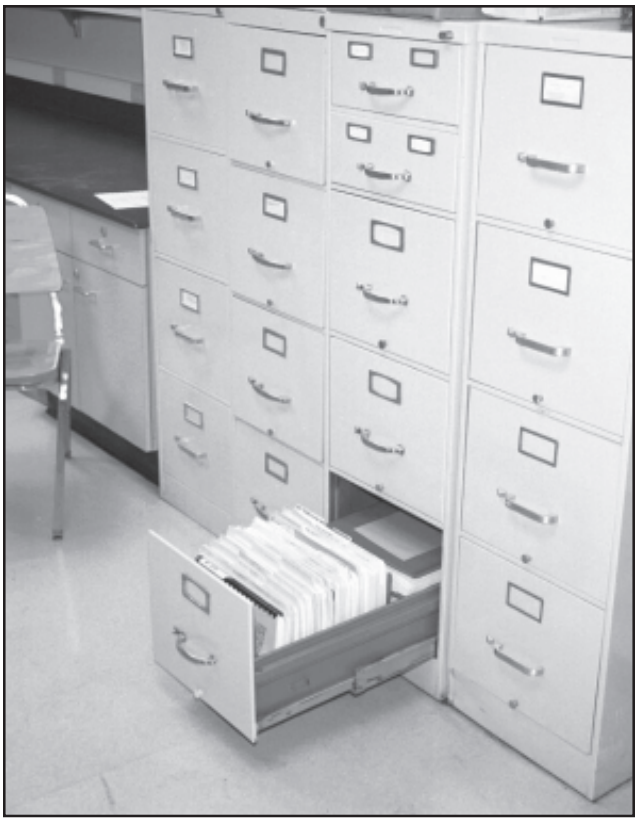

Figure 227. The storage unit for associated documentation is located in the archaeology laboratory.

Reports

A single report, "Cultural Resources Monitoring Report," comprises the entire document collection.

Collection Management Standards

Washington University has procedures in place for accessioning archaeological collections and for collections management.

Comments

Initially the Jefferson Barracks archaeological collections were believed to be stored in bunker 38 at the Tyson Research Center west of St. Louis, however ,these materials were located on the Washington University campus in the archaeology laboratory. According to Angela Gordon, these materials will eventually be transferred to the Research Center for storage.

Recommendations

1. Artifacts require (a) cleaning, (b) sorting, (c) consistent direct labeling (when applicable), (d) placement in appropriately labeled archival primary and secondary containers, and (e) insertion of acid-free labels in each secondary container.

2. When applicable, records require (a) packaging in appropriately labeled archival primary and secondary containers.

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New Hampshire Division of Historic Resources

Concord, New Hampshire

Repository Summary

Volume of Artifacts: 5.49 ft^3

Collection Origin: Pease Air National Guard Base, New Hampshire

Compliance Status: Artifacts require complete rehabilitation to comply with federal guidelines and standards for collections.

Linear Feet of Records: 1.5 linear feet

Collection Origin: Pease National Guard Base, New Hampshire

Compliance Status: Documentation requires complete rehabilitation to comply with federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: October 19, 1998

Points of Contact: Dr. Gary Hume, State Archaeologist; Dr. Richard A. Boisvert, Deputy State Archaeologist

The Division of Historic Resources was established in 1974 as the State Historic Preservation Office. As one of its functions the division has acted as a repository for various state and federal archaeological collections. In 1992, Hartgen Archaeological Associates performed a Stage II cultural resources investigation on Pease Air National Guard Base. As a result of this survey a number of sites were recorded and approximately 5.49 ft^3 and 1.5 linear feet of archaeological collections and associated documentation were recovered. These collections are currently stored the New Hampshire Division of Historic Resources (NHDHR) curation repository, located in the EXACOM building at 99 Airport Road, Concord.

Repository

The New Hampshire Division of Historic Resources is presently leasing a converted industrial manufacturing building, 99 Airport Road, as their curation repository. The structure, built in the 1960's, is subdivided into two office rooms, a workshop/laboratory area, and a warehouse space where collections are kept. The building is on a raised concrete slab with a concrete masonry unit and steel truss construction with a metal deck and flat roof system (Figure 228). There are several water leaks into the NHDHR space from the roof. Recent roof investigations have left the coping and flashing pieces out of place and increased the likelihood of water damage. Also, recent unrepaired damage to the concrete masonry unit construction has created additional problems including bird nesting and intrusion into the curation space. The facility encompasses approximately 4150 ft^2, with approximately 1700 ft^2 devoted to the storage of collections.

Figure 228. The exterior of the building that contains the curation repository and archaeological laboratory.

Collections Storage Area

The Pease Air National Guard Base archaeological collections are located in the 1,700 ft^2 warehouse space at the southern end of the curation facility (Figure 229). Approximately 500 ft^2 of this space has been fenced off and contains archaeological collections from the Sargent Museum. The construction of this area is very similar to the rest of the building except for the lack of ceiling beyond the corrugated steel trusses and windows in this portion of the building. The collection storage area is secured with a locked gate. Additionally, padlocks and key locks are found on all exterior entrances to the building. Activities in the collection storage area include permanent and temporary storage of artifacts and records, materials and supplies storage, as well as loading and unloading materials via the loading dock. Collections present in the area are archaeological in nature, and are currently occupying approximately 60% of the storage space. Environmental controls consist only of a forced hot water heating system with floorboard radiators. The curation repository has no program for pest management, and as stated earlier, occasional problems with birds in the collection area has occurred.

Figure 229. Examples of the shelving and primary storage containers.

Artifact Storage

Archaeological artifacts from Pease Air National Guard Base are stored on a nonmovable metal shelving unit in five acidic bankers box measuring 15.5 x 12.25 x 10 (inches, d x w x h) (Figure 230). Computer generated adhesive labels have been placed on the outside of each of these box with the following information: project name, site name, city, county, state, box number, investigating organization, address, and date of project. Within the boxes the collections are stored in both less then 2-mil plastic zip-lock bags and paper bags, all of which need replacement. Artifacts encompass approximately 5.49 ft^3 (Table 326) and are cleaned, sorted by site number, level, and unit, but are not directly labeled.

Figure 230. Pease Air National Guard Base, New Hampshire, archaeological collections.

Human Skeletal Remains

No DoD human skeletal remains are curated at the New Hampshire Division of Historic Resources.

Records Storage

Records from the Pease Air National Guard Base archaeological collection encompass approximately 1.5 linear feet (Table 327). They are stored in two acidic cardboard boxes 15.5 x 12.25 x 10 (inches,

Table 326.
Percentage by Volume of DoD Artifacts Housed at the New Hampshire Division of Historic Resources

Material Class	Pease Air National Guard Base
Lithics	1
Historic Ceramics	30
Prehistoric Ceramics	0
Fauna	1
Shell	1
Botanical	0
Flotation	1
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	5
Metal	30
Glass	25
Textile	0
Other (mixed historic)	6
Total	100

d x w x h) along side their associated artifact collections. Individual files within the boxes are stored in manila folders and envelopes, which are secured with badly deteriorating rubber bands. None of the records have been archivally processed, and only minimal descriptive information is placed on the secondary containers via adhesive labels. The condition of the records is in danger of deteriorating if conservation measures are not taken.

Paper Records

Paper records comprise approximately 0.79 linear feet. These records consist of background research, survey, excavation, and analysis records, correspondences, and site forms. Some contaminants, such as paper clips and staples are found throughout the collection and as a whole these records are in fair to good shape.

Table 327.
Linear Footage of DoD Associated Documentation Housed at the New Hampshire Division of Historic Resources

Materials	Pease Air National Guard Base
Paper	0.79
Reports	0.38
Oversized*	0.04
Audiovisual	0.00
Photographic	0.29
Computer	0.00
Total	1.50

* Includes maps and other oversized documents.

Reports

Included in the document collection for Pease Air National Guard Base are copies of the draft and final reports, which total approximately 0.38 linear feet.

Maps

Working maps, those used during the fieldwork, have been folded to fit into 81/2x11 inch manila folders and occupy approximately 0.04 linear feet of space.

Photographs

Pease Air National Guard Base photographic records comprise approximately 0.29 linear feet. These records consist of color prints bound together with a rubber band, twelve plastic boxes containing 24 slides each, aerial photographs sealed in a manila envelope, and contact sheets with log sheets stapled to them.

Collection Management Standards

The New Hampshire Division of Historic Resources drafted an accession policy in 1991, which incorporates minimum standards of acceptance and ownership issues. Additionally the State Conservation and Rescue Archaeology Program compiled a laboratory procedure manual that covers storage and management of collections, which the division utilizes.

Comments

The New Hampshire Division of Historic Resources was awarded a Intermodal Surface Transportation Efficiency Act grant in 1994. This money has been set aside for the rehabilitation of archaeological collections in the possession of the NHDHR and to produce a feasibility study for the creation of a collections management and research facility for the state of New Hampshire. The movement of the collections to 99 Airport Road, the interim curation repository, represents the initiation of these plans. However, a great deal more work must be performed to reach recommended standards.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) bagging in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) removal of all contaminants, (c) packaging in appropriately labeled archival primary and secondary containers, (d) creation of a finding aid, and (e) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

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Hunter Research

Trenton, New Jersey

Repository Summary

Volume of Artifacts: 11.7 ft^3

Collection Origin: Fort Dix, New Jersey

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 4.1 linear feet

Collection Origin: Fort Dix, New Jersey; Fort Indiantown Gap, Pennsylvania

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: June 23, 1999

Point of Contact: Christy Morganstein, Collections Manager

Hunter Research Associates is a private contracting firm that has conducted archaeological work on numerous Department of Defense (DoD) installations. Currently, Hunter Research has artifact collections from two installations and associated documentation collections from two installations (Table 328). The St. Louis District previously visited Hunter Research Associates in 1995 while conducting a project for Maryland and Virginia DoD facilities (Holland, et al 1997). During the 1999 visit, the St. Louis District did not reassess material from this previous visit.

Table 328.
Volume of DoD Archaeological Collections Housed at Hunter Research

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Fort Dix	10.51	3.83
McGuire AFB	1.19	—
Fort Indiantown Gap	—	0.27
Totals	11.70	4.10

Repository

The Hunter Research main offices and laboratories occupy a pair of restored early 20th century townhouses located in Trenton (Figure 231). The repository includes approximately 9,000 ft^2 of office, laboratory, and storage space. There are three above grade floors and one below grade basement. The building has a concrete and stone foundation and brick exterior walls. The type of roof is unknown. The building has radiator heat and window air conditioning units. Precautions are taken against insects and rodents on an as-needed basis. The

Figure 231. Exterior of the building which contains Hunter Research.

building is wired with an intrusion alarm that notifies a private security company. Motion detectors have been installed and all doors and windows are kept locked. Manual fire alarms, smoke detectors, and fire extinguishers are located throughout the building.

Four separate areas within the building serve as collection storage areas. The basement is used for artifact and records storage, one room has paper documents and reports, another room holds the maps, and a third room stores the photographic material. All material is organized by project. Each project is assigned a number by Hunter Research, and this number is used to track (on a database) all the collections associated with that number.

Collections Storage Areas

The basement, approximately 1000 ft^2, provides artifact and boxed document storage (Figure 232). In addition to artifacts, the area is also used for material and supply storage. There are numerous overhead pipes, a water heater, and open light fixtures. The two windows are secured and frosted. The floor and ceiling are concrete, while the interior walls are concrete and brick. The collections are located on five metal shelving units that measure 30.5 x 69.5 x 59.75 (inches, d x w x h). Each unit has three shelves.

Michael Tompkin's office serves as a record storage area and an office. The floor is wood and the walls are sheetrock. The office window is covered and secured. No fire extinguishers are located in the room. Records are stored within a closet (boxes and file cabinets) and on wooden shelves. In the closet nonarchival storage boxes (15.5 x 12.25 x 10.25,

Figure 232. Shelving units for artifact and record storage are located in the basement.

inches, d x w x h) provide storage for paper records and bound reports. Also within the closet two standard metal file cabinets (26 x 18 x 27.75, inches, d x w x h) store records. Wood shelves also provide documents storage.

Large maps are stored in the map room. The floor is wood and the walls are sheetrock. The office window is secured. No fire extinguishers are located in the room. This area contains two sets of map cases resting on wood frames. Each set contains two cases that have been stacked on top of each other. Each case measures 31.25 x 53 x 39.25 (inches, d x w x h), and each drawer has a height of 2.75 inches. Additionally, various boxes and map holders are stacked throughout the room. DoD material is also stored within one nonarchival box sitting on the map cases (Figure 233).

The majority of photographic material is stored and processed in the photography room. The room also serves as an office. The floor is wood and the walls are sheetrock. The office windows are covered and secured. No fire extinguishers are located in the room. All photographic material is stored in three-ring binders on two wood shelving units with 4 shelves per unit. Each shelf measures 12 x 46.5 x 14 (inches, d x w x h) (Figure 234).

Figure 233. Map cases and map storage.

Figure 234. Wooden shelves containing the three-ring binders used for the photographic collections.

Artifact Storage

Artifact storage varies according to the project. All material (11.7 ft³) (Table 329) is stored within either acidic or archival boxes, although the majority are acidic. Each box is labeled; some labels are adhesive, computer generated labels, while others are direct marker. Information contained on the label varies, but always includes the project and project number. Secondary containers primarily consist of 2- or 4-mil plastic zip-lock bags. These are directly labeled in marker with provenience, project, date, and investigator. One box contained materials stored within paper bags. Tertiary containers contain nonarchival paper inserts recording additional project and provenience information. All the artifacts are cleaned and sorted by provenience. About 20% of the artifacts are directly labeled.

Table 329.
Percentage by Volume of DoD Artifacts Housed at Hunter Research

Material Class	Fort Dix	McGuire AFB
Lithics	8.8	2.0
Historic Ceramics	31.7	3.1
Prehistoric Ceramics	0.0	0.5
Fauna	4.6	0.5
Shell	1.2	0.0
Botanical	0.5	0.0
Flotation	0.0	0.0
Soil	1.0	0.0
^{14}C	0.0	0.0
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.0
Worked Bone	0.0	0.0
Brick	2.0	0.0
Metal	9.0	2.0
Glass	26.6	2.0
Textile	4.5	0.0
Other	0.0	0.0
Total	89.9	10.1

Human Skeletal Remains

No DoD human skeletal remains are curated at Hunter Research.

Records Storage

The majority of records, which total 4.1 linear feet (Table 330), are stored within nonarchival boxes in the basement. The boxes are of different sizes, but all are glued with removable lids. Most of the boxes have compression damage and a few are torn. All are very overpacked. The boxes are directly labeled with the range of project numbers for the documents they contain. Some of the records are loose within the box, while others are in manila folders. Labeling of the folders is inconsistent, but generally records the project number and folder contents. The remaining

Table 330.
Linear Footage of DoD Associated Documentation Housed at Hunter Research

Materials	Fort Dix	Fort Indiantown Gap
Paper	3.10	0.06
Reports	0.12	0.21
Oversized*	0.29	0.00
Audiovisual	0.00	0.00
Photographic	0.31	0.00
Computer	0.00	0.00
Total	3.83	0.27

* Includes maps and other oversized documents.

Figure 235. Records are stored in an office closet.

records are stored within the three above grade areas described previously. Within Mr. Tompkins office, the records are stored in one box and in the file cabinets within the closet as described above (Figure 235). The file cabinet drawers are labeled with the project numbers they contain. The manila folders, which contain the materials are consistently labeled with project number and contents. The maps within the cases are organized by state and project. Each drawer is labeled appropriately with an insert or taped on, adhesive label. Photographic material is located in plastic three-ring metal binders, which are also stored according to project. Each binder has an adhesive label or insert indicating the range of project numbers contained in the binder.

Paper Records

The paper records comprise almost 75% of the collections. This includes administrative records, survey and excavation records, and small maps. Contaminants such as rubber bands and paper clips are located within the collections. As described above, the collections are located in various areas at Hunter Research.

Reports

Report copies are located in Mr. Tompkin's office and within some of the basement boxes.

Photographs

Photographic records consist of both color and black/white prints, negatives, slides, and contact sheets. They are stored in archival sleeves within three-ring binders. All material from one project is located together.

Maps

As described above, the maps are stored in the map cases.

Collections Management Standards

Hunter Research is an archaeological contracting firm and hold collections only for analysis purposes. They are not a long-term curation repository and do not possess a comprehensive curation plan.

Comments

Hunter Research is not a permanent repository for DoD collections. However, even for short-term storage, the basement area should be rehabilitated to include appropriate lighting, protection from overhead pipes, and relief from the overstacked areas.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives to be stored in a separate, fire-safe, and secure location.

3. Identify a permanent repository (ies) for the transfer of the DoD archaeological collections.

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Louis Berger and Associates

East Orange, New Jersey

Repository Summary

Volume of Artifacts: 17.7 ft^3

Collection Origin: Camp Lejeune, North Carolina

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 4.77 linear feet

Collection Origin: Camp Lejeune, North Carolina

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: June 22, 1999

Point of Contact: Sharla Azizi, Collections Manager

Louis Berger and Associates is a private contracting firm that performs archaeological work for numerous agencies and private sponsors. The firm does not act as a permanent repository for any collections they generate. Currently, Louis Berger and Associates has collections from one Department of Defense (DoD) installation.

Repository

Louis Berger and Associates occupies four floors of an office building. The building is constructed of concrete and brick. An office, laboratory, and processing areas comprise the majority of the building. All archeological material is processed according to the standards of the final repository.

Collection Storage Area

The collection storage area occupies an approximately 384 ft^2 room on the first floor of the building (Figure 236). The room is accessed via a key lock door. Access to the key is limited to

Figure 236. Collections in storage drawer brought to a conference room.

appropriate personnel. The room has a suspended acoustical tile ceiling, sheetrock walls, and a tile floor. There are two windows within the room, one large and one small. The covered windows are locked. Central air-conditioning and heat provide the environmental control, and a fire alarm provides the fire protection in the storage area. Pests are controlled on an as-needed basis. Nonmovable metal shelving units hold the majority of the artifact and record boxes. However, because the shelving units are full, boxes have been stacked on the floor.

Artifact Storage

At the time of the St. Louis District visit, 33% of the archaeological collections were still being processed by Louis Berger and Associates personnel (5 of 15 total boxes). Currently, they are not stored in archival boxes and processing level varies. These materials will be processed to the standards of the other 10 boxes, as described below. Archival cardboard boxes measuring 15.5 x 12.75 x 10.5 (inches, d x w x h) hold the collections. These boxes are folded with telescoping lids. Labeling on the boxes consists of a marker recording information on a preprinted adhesive label. The labels list the company name, project, site number, box number, and contents. Smaller archival boxes provide the secondary containers for 95% of the material. Another adhesive label on these boxes provides site number, provenience, and project. Within these boxes, 4-mil zip-lock plastic bags are used for tertiary containers. These have been intentionally punctured to allow for ventilation and prevent moisture build up. Acid-free inserts into the final zip-lock provides provenience and catalog information. About 90% of the artifacts (Table 331) are directly labeled.

Table 331.
Percentage by Volume of DoD Artifacts Housed at Louis Berger and Associates

Material Class	Camp Lejeune
Lithics	29.3
Historic Ceramics	12.0
Prehistoric Ceramics	41.7
Fauna	0.0
Shell	4.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	2.0
Metal	7.1
Glass	3.9
Textile	0.0
Other	0.0
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated at Louis Berger and Associates.

Records Storage

Original DoD records consist of paper records, reports, and maps, photographic, and computer materials (Table 332). These will be sent with the collections to the final repository. A copy of certain records, historic archival material, and reports are stored in various areas throughout the building. The original records are stored within two archival boxes, as described for the artifacts. Within the boxes the material is sorted by type of record and variously stored within smaller archival boxes and manila folders. The majority of paper records are on acid-free paper. All material is consistently directly labeled. One loose map was located on top of the boxes.

Paper Records

Paper material comprises 4.63 linear feet of the record collections at Louis Berger and Associates. It consists of survey and analysis records.

Table 332.
Linear Footage of DoD Associated Documentation Housed at Louis Berger and Associates

Materials	Camp Lejeune
Paper	4.63
Reports	0.13
Oversized*	0.02
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	4.77

* Includes maps and other oversized documents.

Reports

One 1 report comprising 0.13 linear feet is located with the collections.

Maps

A single map (0.02 linear feet) was located loosely on top of the boxes on the shelving units.

Collections Management Standards

Louis Berger and Associates is an archaeological contracting firm and do not possess a comprehensive curation plan.

Comments

DoD collections are stored on the floor of the collections area.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), and (b) placement in appropriately labeled archival primary and secondary containers.

2. Records require (a) creation of a finding aid, (b) place map in an archival flat file, and (c) store archival duplicate copies of paper records in a separate, fire-safe, secure location.

3. Identify a permanent repository (ies) for the transfer of the DoD archaeological collections.

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Ecology and Environment, Inc.

Lancaster, New York

Repository Summary

Volume of Artifacts: 3.6 ft^3

Collection Origin: New London Naval Submarine Base, Connecticut; Naval Weapons Station, Earle, New Jersey; Naval Construction Battalion Center, Davisville, Rhode Island; Naval Material Data Systems Group, Morgantown, West Virginia.

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 2.9 linear feet

Collection Origin: New London Naval Submarine Base, Connecticut; Naval Weapons Station, Earle, New Jersey; Naval Construction Battalion Center, Davisville, Rhode Island; Naval Material Data Systems Group, Morgantown, West Virginia.

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: November 13, 1998

Point of Contact: Leonid Shmookler, Archaeologist

Ecology and Environment (E&E) is a private contracting firm whose primary function is environmental compliance. Approximately 3.6 cubic feet of artifacts and 2.9 linear feet of documentation from projects conducted on Department of Defense (DoD) installations (Table 333) are held by the firm.

Repository

Collections are stored at the Ecology and Environment Analytical Services Center (Figure 237), which is approximately two miles from the main office complex.

Table 333.
Volume of DoD Archaeological Collections Housed at Ecology and Environment

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Naval Construction Battalion Center	3.33	1.94
Naval Material Data System Group	0.09	0.17
NSB New London	0.09	0.50
NWS Earle	0.09	0.29
Totals	3.60	2.90

Collections Storage Area

The Analytical Services Center is approximately 30 years old and is, in effect, a large warehouse. The foundation is concrete, the exterior and interior walls are concrete block, and the roof is corrugated metal. The ceiling is exposed and building insulation is

Figure 237. The Ecology and Environment archaeological collection repository.

Figure 238. Storage containers used for Department of Defense archaeological collections.

visible. Collections are stored in a specific portion of the larger storage area, which is delineated by metal fencing and encompasses 360 ft^2. It can be re-sized, by moving the fence as needed, and serves as storage and research space for both artifacts and records. The area is currently at about 75% of capacity and all the collections are archaeological in nature. The collections storage area does not have any environmental controls. Security measures include dead-bolt locks on the exterior doors and controlled access for the entire repository. Fire protection measures consist of fire extinguishers that are located throughout the building as well as a fire alarm wired to the fire department. Pest management occurs on an as-needed basis, however, no evidence of infestation was noted during the assessment.

Artifact Storage

Artifacts from DoD installations housed at E&E are stored on wooden desks and tables in an acidic cardboard box that measures 16 x 12 x 10 (inches, d x w x h) (Figure 238). The box is secured with a removable lid. Within the box, collections are stored in plastic boxes that measure 9 x 7.3 x 2.5 (inches, d x w x h) and are secured with removable lids. Within these plastic boxes, artifacts are held in plastic zip-lock bags that have paper inserts with project, date, site number and name, investigator,

Table 334.
Percentage by Volume of DoD Artifacts Housed at Ecology and Environment

Material Class	Naval Construction Battalion Center	Naval Material Data System Group	NSB New London	NWS Earle
Lithics	11.4	2.6	2.5	2.6
Historic Ceramics	3.1	0.0	0.0	0.0
Prehistoric Ceramics	0.0	0.0	0.0	0.0
Fauna	1.5	0.0	0.0	0.0
Shell	63.8	0.0	0.2	0.0
Botanical	0.0	0.0	0.0	0.0
Flotation	0.0	0.0	0.0	0.0
Soil	0.0	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0
Brick	1.5	0.0	0.0	0.0
Metal	7.7	0.0	0.0	0.0
Glass	2.8	0.0	0.0	0.0
Textile	0.0	0.0	0.0	0.0
Other (roofing shingle fragments)	0.3	0.0	0.0	0.0
Total	92.1	2.6	2.7	2.6

Table 335.
Linear Footage of DoD Associated Documentation Housed at Ecology and Environment

Material Class	Naval Construction Battalion Center	Naval Material Data System Group	NSB New London	NWS Earle
Paper	0.38	0.04	0.38	0.04
Reports	0.06	0.08	0.04	0.25
Oversized*	1.00	0.04	0.08	0.00
Audiovisual	0.00	0.00	0.00	0.00
Photographic	0.50	0.00	0.00	0.00
Computer	0.00	0.00	0.00	0.00
Total	1.94	0.17	0.50	0.29

* Includes maps and other oversized documents.

and provenience information written on them. Artifacts encompassing approximately 3.6 ft^3 (Table 334) are sorted by site number and have been cleaned and some are labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at Ecology and Environment.

Records Storage

Records from DoD installations encompass approximately 2.9 linear feet (Table 335). All records are stored in hanging manila folders on a table in the collections area. Individual files are stored in manila folders that are directly labeled in marker. Records are stored with artifacts generated from projects conducted by the firm. There is no area that is specifically set aside for records storage.

Paper Records

Paper records comprise approximately 0.84 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection, but as a whole, materials are in good condition.

Reports

Report records encompass approximately 0.43 linear feet and are stored in the same manner as the paper records.

Photographs

Photographs encompass 0.5 linear feet of the collection and are stored with paper records in manila folders.

Maps

Maps encompass 1.12 linear feet of the collection and are stored with the other record types.

Collections Management Standards

Ecology and Environment is not a permanent curation repository and does not have a comprehensive curation plan. However, when preparing materials for long-term curation they follow policies and guidelines established by the state that will ultimately curate the collections.

Comments

Records are arranged by project and file folders are labeled in a consistent manner.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of maps in archival flat files, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies to be stored in a separate, fire-safe, and secure location.

3. Identify a permanent repository (ies) for the transfer of the DoD archaeological collections.

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Panamerican Consultants

Depew, New York

Repository Summary

Volume of Artifacts: 14.62 ft^3

Collection Origin: Picatinny Arsenal, New Jersey; Fort Hamilton, New York; Griffiss Air Force Base, New York; West Point Military Academy, New York.

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 9.23 linear feet

Collection Origin: Picatinny Arsenal, New Jersey; Griffiss Air Force Base, New York; West Point Military Academy, New York.

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: November 11, 1998

Point of Contact: Michael Cinquino, Director

Panamerican Consultants is a private contracting firm whose primary function is environmental compliance throughout the United States. Their Depew, New York office holds approximately 14.62 ft^3 of artifacts and 9.23 linear feet of documentation from projects conducted on four Department of Defense (DoD) installations (Table 336).

Table 336.
Volume of DoD Archaeological Collections Housed at Panamerican Consultants

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Fort Hamilton	2.22	—
Griffiss Air Force Base	10.00	4.77
Picatinny Arsenal	1.20	1.83
West Point Military Academy	1.20	2.63
Totals	14.62	9.23

Repository

The Panamerican Consultants' office building is approximately 30 years old and was once used as a law office (Figure 239). The foundation is concrete, the exterior walls are brick, and the roof is built-up asphalt. The first level of the building contains offices for the staff and the basement serves as a laboratory/temporary artifact and record storage area.

Collections Storage Area

Collections are stored in the basement of the building. The portion of the basement holding DoD collections encompasses 225 ft^2. The floor of the collections area is concrete and the interior walls are

Figure 239. Panamerican Consultants office.

concrete block. The ceiling is suspended acoustical tile and there is one small window that is sealed for security purposes. The area serves as storage and research space for both artifacts and records. The area is currently at about 90% capacity and all the collections are archaeological in nature. Collections are stored on wood shelves that measure 12 x 80 x 68 (inches, d x w x h). Space heaters are used for environmental control. Security measures include a dead-bolt lock on the door leading to the collections and controlled access to the laboratory area. Fire protection measures consist of fire extinguishers that are located throughout the building, as well as a fire alarm wired to the fire department. Pest management occurs on an as-needed basis and no evidence of infestation was noted during the assessment.

Artifact Storage

Artifacts from DoD installations housed at Panamerican are in acidic cardboard boxes that measure 16 x 12 x 10 (inches, d x w x h) (Figure 240). The boxes are secured with telescoping lids. Within the boxes, collections are stored in plastic, zip-lock bags that have paper inserts with project, date, site number and name, investigator, and provenience information written on them. Artifacts encompass approximately 14.62 ft^3, (Table 337), and are sorted by site number.

Figure 240. Collections storage area.

Table 337.
Percentage by Volume of DoD Artifacts Housed at Panamerican Consultants

Material Class	Fort Hamilton	Griffiss AFB	Picatinny Arsenal	West Point Military Academy
Lithics	0.4	1.2	7.0	0.4
Historic Ceramics	2.3	23.3	0.0	3.3
Prehistoric Ceramics	0.0	0.0	0.0	0.0
Fauna	0.4	4.0	0.0	0.0
Shell	0.4	2.8	0.1	0.0
Botanical	0.0	0.5	0.0	0.0
Flotation	0.0	0.0	0.0	0.0
Soil	0.0	0.0	0.0	0.0
^{14}C	0.0	0.1	0.1	0.0
Human Skeletal	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.1	0.0
Brick	1.5	1.8	0.0	0.1
Metal	3.0	16.2	0.1	1.1
Glass	6.8	16.6	0.8	3.3
Textile	0.0	0.1	0.0	0.0
Other (leather, rubber, roof shingles, plastic, tar paper, and asphalt)	0.3	1.8	0.1	0.0
Total	15.1	68.4	8.3	8.2

Human Skeletal Remains

No DoD human skeletal remains are curated at Panamerican Consultants.

Records Storage

Records from DoD installations encompass approximately 9.23 linear feet (Table 338). For completed projects, records are stored in the collections area with the artifacts. For on-going projects, records are stored in the office of the respective project leader. Individual files are stored in manila folders that are directly labeled in marker.

Table 338.
Linear Footage of DoD Associated Documentation Housed at Panamerican Consultants

Materials	Griffiss AFB	Picatinny Arsenal	West Point Military Academy
Paper	2.79	0.46	2.13
Reports	0.83	0.13	0.00
Oversized*	0.31	1.00	0.50
Audiovisual	0.00	0.00	0.00
Photographic	0.00	0.83	0.17
Computer	0.00	0.08	0.00
Total	4.77	1.83	2.63

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 5.38 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection, but on a whole, materials are in good condition.

Report Records

Report records encompass approximately 0.96 linear feet and are stored in the same manner as the paper records.

Maps

Maps encompass approximately 1.81 linear feet of the collections.

Photographs

Photographs encompass 1.0 linear foot of the collection and are stored with paper records in manila folders.

Computer Records

Computer records encompass 0.08 linear feet of the collection and are stored with the other record types.

Collections Management Standards

Panamerican Consultants is not a permanent curation repository and does not have a comprehensive curation plan. However, when preparing materials for long-term curation they follow policies and guidelines established by the state that will ultimately house the collections.

Comments

1. Records are arranged by project and file folders are labeled in a consistent manner.

2. Griffiss Air Force Base collections are scheduled to be sent to the State University of New York at Syracuse for permanent curation.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable) and (b) bagging in appropriately labeled archival primary containers.

2. Records require (b) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, and (d) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

Editor's Note

As of March 2000 Panamerican has moved to a new facility and has transferred Grifiss Air Force Base collections to the Syracuse Archaeological Research Center for permanent curation.

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Staten Island Institute of Arts and Science

Staten Island, New York

Repository Summary

Volume of Artifacts: 1.09 ft^3

Collection Origin: Fort Wadsworth, New York

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.17 linear feet

Collection Origin: Fort Wadsworth, New York

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: January 8, 1999

Point of Contact: Edward Johnson, Curator

Approximately 1.09 ft^3 of Department of Defense (DoD) artifacts and 0.17 linear feet of associated documentation are held by the Staten Island Institute of Arts and Science.

Repository

The Staten Island Institute of Arts and Science was built in two parts, the basement and first floor in 1918, and the second floor and attic in 1928. The building was constructed as a museum and continues in this function today. It has a concrete foundation, brick exterior walls, and a slate tile roof. The building houses offices, and display and storage rooms. Archaeological materials are stored on the first floor of the building.

Collections Storage Area

The collections storage area holds all archaeological materials. The room's flooring consists of concrete covered by tile. Interior walls are wallboard, and the ceiling is plaster. There are no windows in the collections room. The area comprises about 88 ft^2 and is used for storage and artifact and record study. The area is currently at about 100% capacity, and all the collections are archaeological in nature. Environmental controls for the room includes central air-conditioning and radiator heat. Security measures include an intrusion alarm, a key lock on the room's door, and controlled access for both the collections area and the rest of the repository. Fire protection measures consist of fire extinguishers located near the collections storage area. There is no pest management program in place, however, no types of pest problems were noted by the assessment team.

Artifact Storage

Artifacts housed at the Staten Island Institute of Arts and Science are stored on nonmovable, metal

Figure 241. The entire Department of Defense collections at the Staten Island Institute of Arts and Science.

shelving units. The collections are stored in acidic cardboard boxes that measure 15 x 12 x 10.5 (inches, d x w x h). Boxes are secured with telescoping lids. Within the box, materials are stored in plastic, zip-lock bags that are directly labeled with information such as site name and catalog number (Figure 241). Artifacts encompassing approximately 1.09 ft^3 (Table 339) are sorted by project. Some artifacts have been cleaned and directly labeled.

Table 339.
Percentage by Volume of DoD Artifacts Housed at Staten Island Institute of Arts and Science

Material Class	Fort Wadsworth
Lithics	90
Historic Ceramics	0
Prehistoric Ceramics	10
Fauna	0
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	0
Glass	0
Textile	0
Other	0
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at the Staten Island Institute of Arts and Science.

Records Storage

Records from Fort Wadsworth encompass approximately 0.17 linear feet (Table 340). Records are in good condition, are stored in acidic cardboard boxes that measure 12 x 6 x 4 (inches, d x w x h), and are arranged by site number. The records are housed in the same room as the artifacts, but are on a table located adjacent to the shelves.

Table 340.
Linear Footage of DoD Associated Documentation Housed at the Staten Island Institute of Arts and Science

Materials	Fort Wadsworth
Paper	0.17
Reports	0.00
Oversized*	0.00
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.17

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 0.17 linear feet of museum catalog cards. No contaminants were noted throughout the collection. All catalog cards also exist in database form on computer.

Collections Management Standards

The Staten Island Institute of Arts and Science currently serve as a long-term curation repository for DoD archaeological collections. They have curation personnel to process incoming collections, as well as a curation plan that is followed for all aspects of collections management.

Comments

Artifacts and records are arranged by site number.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) the insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) creation of a finding aid, (c) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

3. Initiate a program for pest management including monitoring, preventive measures and mitigation.

4. Upgrade fire detection and suppression system to include (whatever is needed) fire extinguishers, manual fire alarms, smoke and heat detectors, and a sprinkler/ suppression system.

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Tippetts, Abbett, McCarthy, and Stratton Consultants, Inc.

New York, New York

Repository Summary

Volume of Artifacts: 11.31 ft^3

Collection Origin: Naval Underwater Warfare Center, New London, Connecticut; Brooklyn Naval Station, New York; Naval Weapons Industrial Reserve, Plant Calverton, New York.

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 1.71 linear feet

Collection Origin: Naval Underwater Warfare Center, New London, Connecticut; Brooklyn Naval Station, New York; Naval Weapons Industrial Reserve Plant, Calverton, New York.

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: 0.06 ft^3

Collection Origin: Brooklyn Naval Air Station, New York

Compliance Status: Human remains require examination and compliance with the Native American Grave Protection and Repatriation Act

Assessment

Date of Visit: January 5, 1999

Point of Contact: Michael Pappalardo, Senior Archaeologist

Approximately 11.31 ft^3 of artifacts. 0.06 ft^3 of human remains, and 1.79 linear feet of documentation (Table 341) are held at Tippetts, Abbett, McCarthy, and Stratton Consultants (hereafter, TAMS).

Table 341.
Volume of DoD Archaeological Collections Housed at TAMS

Installation	Archaeological Materials (ft^3)	Human Skeletal Remains (ft^3)	Records (linear feet)
Naval Station Brooklyn	1.20	0.06	1.23
Naval Underwater Warfare Center, New London	1.26	—	0.04
Industrial Reserve Plant	8.85	—	0.52
Totals	11.31	0.06	1.79

Repository

The TAMS curation repository is the basement of the TAMS office building, a large office building located in midtown Manhattan. The building was built in 1958 and has always housed offices. It has a concrete foundation, brick and prefabricated exterior walls, and a built-up asphalt roof (Figure 243).

Figure 242. The building containing the offices of TAMS is located in midtown Mahattan.

Figure 243. Collections storage in the basement.

Collections Storage Area

The collections storage area holds all archaeological materials. The room's flooring consists of concrete. Interior walls are wallboard and concrete block and the ceiling is exposed flooring from the level above. There are no windows in the collections room. The area comprises about 450 ft^2 and is used exclusively for temporary storage. The area is currently at about 50% capacity and all the collections are archaeological in nature. Environmental controls include central air-conditioning and heat. Security measures include a 24-hour guard and controlled access for the entire repository. Fire protection measures consist a sprinkler and suppression system, fire extinguishers, and a fire alarm wired to the fire department. There is no pest management program in place, however, no pest problems were noted by the assessment team.

Artifact Storage

Artifacts housed at TAMS are stored on immovable, metal shelving units (Figure 242). The collections are stored in acidic cardboard boxes that measure 16 x 13 x 10.5 (inches, d x w x h). Boxes are secured with telescoping lids. Within each box, materials are stored in plastic, zip-lock bags that are directly labeled with information such as project, date, site number and name, investigator, and provenience information. Artifacts encompass approximately 11.31 ft^3 (Table 342), and are sorted by project. Some artifacts have been cleaned and directly labeled.

Table 342.
Percentage by Volume of DoD Artifacts Housed at TAMS

Material Class	Naval Station Brooklyn	Naval Underwater Warfare Center, New London	Naval Weapons Industrial Reserve Plant
Lithics	0.0	0.0	22.8
Historic Ceramics	0.0	2.2	15.6
Prehistoric Ceramics	0.0	0.0	0.0
Fauna	0.0	0.0	1.7
Shell	0.0	0.0	2.8
Botanical	0.0	0.0	0.0
Flotation	0.0	0.0	0.0
Soil	10.0	0.6	0.0
^{14}C	0.0	0.0	0.6
Human Skeletal	0.6	0.0	0.0
Worked Shell	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0
Brick	0.0	2.2	2.8
Metal	0.5	3.2	21.0
Glass	0.0	2.2	10.6
Textile	0.0	0.0	0.0
Other (bullets)	0.0	0.6	0.0
Total	11.1	11.0	77.9

Human Skeletal Remains

Approximately 0.06 ft^3 of human skeletal remains from Brooklyn Naval Station are curated at TAMS. The remains require examination and compliance with the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et seq.).

Records Storage

Records from archaeological projects conducted by TAMS encompass approximately 1.79 linear feet (Table 343). Records are in good condition and are stored in manila folders, however, they are stored in

Table 343.
Linear Footage of DoD Associated Documentation Housed at TAMS

Materials	Naval Station Brooklyn	Naval Underwater Weapons Center	Naval Weapons Industrial Reserve Plant
Paper	1.02	0.00	0.15
Reports	0.04	0.00	0.00
Oversized*	0.04	0.04	0.08
Audiovisual	0.00	0.00	0.00
Photographic	0.13	0.00	0.29
Computer	0.00	0.00	0.00
Total	1.23	0.04	0.52

* Includes maps and other oversized documents.

boxes with the archaeological material. The records in the boxes are duplicates of records that are maintained in computer format.

Paper Records

Paper records comprise approximately 1.17 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection.

Report Records

Report records encompass approximately 0.04 linear feet and are with collections in the artifact room.

Map Records

Maps encompass 0.16 linear feet and are with collections in the artifact room.

Photographs

Photographs encompass 0.42 linear feet and are with collections in the artifact room.

Collections Management Standards

TAMS is an archaeological contracting firm and not a long-term curation repository. It serves only as a temporary curation repository, and the collections have been processed as part of their analysis.

Comments

1. Artifacts are in good condition, but are not in archival containers.

2. Records are arranged by project and file folders are labeled in a consistent manner, but are stored with the collections.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) removal of all contaminants, (c) packaging in appropriately labeled archival primary and secondary containers, (d) placement of maps in an archival, flat file case, (e) creation of a finding aid, (f) creation of an archival duplicate copy of paper records, and (g) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Permanent curation repository(ies) should be identified for the transfer and long-term care of the DoD collections that have not been designated a final repository.

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New South Associates

Mebane, North Carolina

Repository Summary

Volume of Artifacts: 1.79 ft^3

Collection Origin: Fort Bragg, North Carolina

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.69 linear feet

Collection Origin: Fort Bragg, North Carolina

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: December 16, 1998

Point of Contact: Lawrence Abbott, Archaeologist

New South Associates is a professional cultural resources consulting firm who in the past ten years have performed numerous cultural resources projects on Department of Defense (DoD) installations. New South Associates' main office is in Stone Mountain, Georgia, and has two branch offices, one located in Columbia, South Carolina, and one in Mebane, North Carolina. The firm's main curation facility is located at their main office in Stone Mountain; therefore, artifact collections and record collections are only temporarily stored at the Mebane office. The Mebane branch office presently stores approximately 1.79 ft^3 and 0.69 linear feet of Department of Defense (DoD) archaeological collections and associated documentation from Fort Bragg.

Repository

The Mebane office of New South Associates is located in a converted attached garage of a 1960s brick ranch home that has a concrete foundation and a shingled roof (Figure 244). The interior of the office is a large room with a linoleum tile floor, plaster ceiling, and brick and wood paneled walls.

Figure 244. Exterior of the building containing the offices of New South Associates.

Six large windows have been placed within the space of where the garage doors once were. This large room, 760 ft^2, primarily functions as an office and collections repository for the consulting firm. Environmental controls within this office are maintained by a forced-air heating system and a window air-conditioning unit. No fire protection measures have been installed. Security measures consist of dead-bolt and key locks on the doors and locks on the windows. There is no pest management program in place for the facility; however, infestation has not been a problem and none was noted during the assessment.

Artifact Storage

Archaeological artifacts are kept on a nonmovable metal utility shelving unit in an alcove directly next to the front windows of the office. This collection is stored in a nonarchival box measuring 20 x 15.5 x 10 (inches, d x w x h) (Figure 245). The lid of the box is directly labeled in marker with the following information, ”Spring Lake Bypass Sample Survey Sites 31CD19, 31CD54, 31CD66, 31CD68, 31CD72, 31CD91, 31CD316 through 31CD360.” Within the box the collection is stored in 2-mil plastic zip-lock bags. Nonarchival computer paper is used to cushion the collection. Artifacts encompass approximately 1.79 ft^3 (Table 344), and are cleaned, sorted by site number, provenience, and material class. They are not directly labeled. Nonarchival paper tags are placed with the materials in small nested zip-lock bags. These tags contain the following information: project site no., records, transect, shovel test, remarks, bag number, date, level, state site number, and accession number.

Figure 245. Fort Bragg archaeological collections that are being curated.

Table 344.
Percentage by Volume of DoD Artifacts Housed at New South Associates

Material Class	Fort Bragg
Lithics	77
Historic Ceramics	0
Prehistoric Ceramics	18
Fauna	0
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	5
Glass	0
Textile	0
Other	0
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at New South Associates.

Records Storage

Records from Fort Bragg total approximately 0.69 linear feet (Table 345), and are stored in a the same kind of nonarchival box as the artifacts. The box is directly labeled on the lid with the following information, “Spring Lake Bypass notes, site forms, photos, etc.” Inside the box, computer paper is used to buffer the records and occupy the empty space in

Table 345.
Linear Footage of DoD Associated Documentation Housed at New South Associates

Materials	Fort Bragg
Paper	0.52
Reports	0.00
Oversized*	0.10
Audiovisual	0.00
Photographic	0.06
Computer	0.00
Total	0.68

* Includes maps and other oversized documents.

the box. Secondary containers for the records consist of manila folders and two-inch plastic binders. These secondary containers are in good condition and are directly labeled in pencil with a description of the materials found within them. There are no accession data available for these records, and only the photographic material is archivally processed.

Paper Records

Paper records consist of approximately 0.52 linear feet of administrative papers (permits, proposals, and comments), originals and copies of site forms, and eleven field notebooks from the project. Their overall condition is fair.

Maps

Maps encompass less then 0.10 linear feet of the records collection. Overall their condition is fair.

Photographs

Photographs encompass less then 0.06 linear feet of the collection. These materials are stored in a two-inch three-ring binder and consist of slides, contact sheets, and photographic logs. All photographic material is placed in archive quality sleeves.

Collection Management Standards

The Mebane branch office of New South Associates is a temporary curation repository and has no comprehensive plan for the curation of archaeological collections.

Comments

As a cultural resources management firm, New South Associates has a policy that archeological collections are stored only temporarily until projects are completed and final reports have been published.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) placement of maps in an archival, flat file case, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies in a separate, fire-safe, and secure location.

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North Carolina Office of State Archaeology

Raleigh, North Carolina

Repository Summary

Volume of Artifacts: 36.35 ft^3

Collection Origin: Sunny Point Military Ocean Terminal, North Carolina

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 1.02 linear feet

Collection Origin: Sunny Point Military Ocean Terminal, North Carolina

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: December 27, 1998

Points of Contact: Dr. Steve Clagett, State Archaeologist and Dr. Bill Oliver, Archaeologist.

North Carolina's Office of State Archaeology (NCOSA) coordinates and implements a statewide program of prehistoric, historic, and underwater archaeology. NCOSA serves as the professional archaeological staff for the State Historic Preservation Office and the North Carolina Historical Commission. In addition, it serves as the state repository for archaeological collections. Because of a previous St. Louis District visit to this repository to assess U.S. Navy collections (Bade and Shingleton 1999), the only DoD collections addressed in this report are those generated from cultural resource projects on the U.S. Army's Sunny Point Military Ocean Terminal. This materials accounts for approximately 36.35 ft^3 of archaeological material and 1.02 linear feet of associated records.

Repository

NCOSA currently occupies two buildings in downtown Raleigh, North Carolina. The first, a structure known as the Heartt House, was originally constructed in 1870 as a private residence (Figure 246). This building is a two-story wooden framed house with a brick foundation and a shingled and built-up asphalt roof. This structure has approximately 5,000 ft^2 of floor space, which includes offices, artifact holding, processing, conservation, and storage areas. In addition, there are study rooms for artifacts and records, as well as storage space for various other materials.

The second building is a newly acquired and renovated warehouse located on West Lane Street in Raleigh. Built in 1927, this two-story brick warehouse has a concrete foundation and a flat rubber membrane roof, and encompasses approximately 14,400 ft^2 of floor space (Figure 247).

Figure 246. Exterior of the Heartt House which contains the offices of the North Carolina Office of State Archaeology.

Figure 247. Front of the newly renovated West Lane Street Warehouse, where the new laboratory and storage repository are located.

Set within the slope of a hill, the north and east sides of the first floor are located below grade. Once renovations are complete, this facility will be utilized as the NCOSA's archaeology laboratory and curation repository. The first floor will provided state-of-the-art facilities for artifact processing, laboratory and study areas, offices, records storage, photographic processing, as well as a public reception area. The second floor, 7,200 ft^2, will strictly be utilized for collection storage.

Collections Storage Areas

At the time of the St. Louis District visit, collections from Sunny Point Military Ocean Terminal collections were being stored in both the first floor hallway at the Heartt House and in the second floor collection storage area at the warehouse. The first floor hallway of Heartt House has of wood floors and plaster walls and ceiling. Since it is an interior hallway there are no windows within the room. Security within the Heartt House is minimal, and includes key locks on all exterior doors and simple window locks on the windows. Additionally, the Capital Area Police patrol the area regularly and have access to the building. Environmental controls are maintained throughout the building, including the collection storage area, with centralized heat and air conditioning. Fire protection within this storage area is provided by the use of smoke detectors, manual fire alarms, and fire extinguishers.

The second floor storage area of the warehouse is a large room with a concrete floor and brick walls. Large windows within the room have not been covered, however they have sealed thermopanes and ultraviolet filters. At the time of our visit approximately 10–15% of the room was being utilized for collection storage. However, eventually all archaeological collections presently stored at Heartt House will be moved to this warehouse storage facility. When renovations are complete, security measures will consist of dead bolt locks, lockable storage cabinets, motion detectors, and intrusion alarms wired to the Capital Police Department and disarmed by a keypad. New heating, ventilation, and air conditioning equipment and controls have been added and integrated into the existing infrastructure. Both floors of the building have been equipped with air-handler units with reheat coils for relative humidity controls. The new system uses standard filters that will be changed regularly by state maintenance staff. Fire protection within the storage area is provided by smoke and heat sensors, new fire extinguishers, and fire alarms wired to the State Capital Police Department dispatch that then notifies the Raleigh fire department. No written pest management plan exist for this new facility, however, incoming collections will be isolated in a room near the loading dock on the first floor, and a freezer will be used to treat infested objects.

Artifact Storage

Artifacts from Sunny Point Military Ocean Terminal are stored at both of the NCOSA buildings and encompass approximately 36.35 ft^3 (Table 346). The collections are sorted by site number, provenience,

Table 346.
Percentage by Volume of DoD Artifacts Housed at the North Carolina Office of State Archaeology

Material Class	Sunny Point Military Ocean Terminal
Lithics	4.1
Historic Ceramics	15.9
Prehistoric Ceramics	24.3
Fauna	2.6
Shell	6.9
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	21.8
Metal	11.8
Glass	12.6
Textile	0.0
Other	0.0
Total	100.0

and material class. All collections have been cleaned and directly labeled, however label information on artifacts varies by project. The collections stored at the Heartt House are located in stacked boxes on the floor of the hallway. These collections consist of thirteen acidic cardboard boxes varying in size between 8 x 18 x 11 to 12.5 x 24 x 8.25 (inches, d x w x h). Half of the boxes are directly labeled in marker and the other half have computer generated labels filled out in marker on the fronts of the boxes (Figure 248). Only the computer generated labels are consistent and have the following information: project name, site name/number, and contents.

Figure 248. Primary and secondary containers containing Military Ocean Terminal Sunny Point archaeological collections.

Within all primary containers, 68% of the collections are stored in nonarchival removable lid boxes, 22% are stored in 4-mil zip-lock bags, 5% are stored in 2-mil zip-lock bags, and 5% are stored in paper bags. All secondary containers are labeled either directly or with adhesive labels. There are labels inserts with some of the collections, approximately 66%, however, none are on archival paper.

The collections stored at the warehouse are located on a nonmovable metal shelving unit measuring 80 x 36 x 30 (inches, d x w x h). These collections consist of thirty acidic cardboard boxes, each measuring 30 x 4.5 x 10 (inches, d x w x h). Adhesive typed labels have been placed on the outside of each box with the following information: county, storage location, and site numbers. Within the primary containers all the collections are stored in paper bags. All secondary containers are labeled directly in either marker or pencil. Labeling of these bags appears to be consistent within project, however, some projects tend to provided more information then others.

Human Skeletal Remains

No DoD human skeletal remains are curated at NCOSA.

Records Storage

Associated archaeological records for the Sunny Point Military Ocean Terminal total 1.02 linear feet (Table 347), and are kept at the Heartt House in two locations. A small portion are stored in a manila envelope on an office table. This envelope is the original envelope in which these documents were sent to NCOSA, and is labeled directly with the

Table 347.
Linear Footage of DoD Associated Documentation at the North Carolina Office of State Archaeology

Materials	Sunny Point Military Ocean Terminal
Paper	0.32
Reports	0.18
Oversized*	0.43
Audiovisual	0.00
Photographic	0.08
Computer	0.00
Total	1.02

* Includes maps and other oversized documents.

contractor's address, NCOSA's address, and the project designation, "MOTSU Buffer Zone". The paper records from the "Buffer Zone Project" are only in fair condition and require some rehabilitation. The remaining associated documentation is stored in one of the thirteen artifact boxes stored on the floor in the first floor hallway. This primary container has an adhesive computer generated label that lists project name, site name/ number, and contents. The paper records located in the collections have been archivally processed and are in excellent condition.

Paper Records

Paper records from both collections comprise approximately 0.32 linear feet. These records consist of survey forms, fieldnotes, and artifact lists.

Reports

Reports comprise approximately 0.18 linear feet of the collection.

Maps

Maps and drawings make up almost half of the records collections, 0.43 linear feet, and include site maps, field graphics and two sets of oversized rolled maps.

Photographs

Photographs comprise 0.08 linear feet of the records collection. Both black and white prints and slides have been archivally processed and placed in archival plastic sleeves.

Collection Management Standards

Written policies exist for minimum standards of acceptance, washing, cataloging, packaging, collection access, conservation, labeling, storage of slides, maps, photographs/negatives, microforms, videos, and documentation, and deaccesioning.

Comments

At the time of the St. Louis District visit, renovations were in the final stages at the warehouse. Once completed, efforts will be made to rehabilitate all collections in the care of the NCOSA before being curated in this storage repository. Therefore, the present condition of the DoD collections within the care of NCOSA is likely to improve in the near future.

Recommendations

1. Artifacts require (a) placement in appropriately labeled archival primary and secondary containers, and (b) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of maps in an archival, flat file case, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Initiate a program for pest management including monitoring, preventive measures, and mitigation.

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TRC Garrow and Associates

Chapel Hill, North Carolina

Repository Summary

Volume of Artifacts: 16.09 ft^3

Collection Origin: Camp Lejeune, North Carolina and Fort Bragg, North Carolina

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 8.9 linear feet

Collection Origin: Camp Lejeune, North Carolina and Fort Bragg, North Carolina

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: March 4, 1999

Points of Contact: Paul Webb, Program Manager and Tracy Millis, Senior Archaeologist

TRC Garrow and Associates is part of an environmental firm that conducts various environmental compliance projects, including archaeological work. The facility does not act as a permanent repository. All DoD material is under contract and will be rehabilitated and transferred to a designated permanent repository. Currently, TRC Garrow and Associates has archaeological collections from two DoD facilities (Table 348).

Table 348.
Volume of DoD Archaeological Collections Housed at TRC Garrow and Associates

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Camp Lejeune MCB	11.73	5.4
Fort Bragg	4.36	3.5
Totals	16.09	8.9

Repository

TRC Garrow and Associates occupies office space within an office building built during the 1980s. The building has a concrete foundation and a brick, concrete, and glass exterior (Figure 249). Within the building, TRC Garrow and Associates offices are in Suite 200. This Suite includes offices, conference space, laboratory areas, and an artifact storage area. The majority of artifact material, unless under study or rehabilitation, is stored within a locked storage room that is described below. Additional repository security includes a key-pad lock that controls access to Suite 200 and security personnel who patrol the parking areas. All document collections are kept in the pertinent staff offices during project study, but are placed with the artifacts for storage prior to transfer to the permanent repository. Archaeological material at TRC Garrow and Associates are

Figure 249. Exterior of the office building that contains the TRC Garrow and Associates offices.

processed and accessioned according to the guidelines of the North Carolina Office of State Archaeology (NCOSA).

Collections Storage Area

The locked storage area, approximately 108 ft^2, provides artifact and document storage (Figure 250). In addition to archaeological material, the area is also used for material/supply storage, as well as photographic equipment storage. The room has a concrete floor covered with carpet, sheetrock walls, and a suspended acoustical tile ceiling. There are no windows in the room. As mentioned previously, the room has a key-lock which is accessed only by pertinent personnel. Central air-conditioning and heating provide the environmental controls, which are set to staff comfort levels. There is no humidity control. A fire extinguisher located outside of the door to the room provides fire protection. Cleaning crews clean the office and laboratory space only. Although there is no routine pest management program, no signs of infestation have occurred. Collections within this room are located on metal shelving units that measure 17.75 x 36.0 x 71.75 (inches, d x w x h). Each unit has six shelves, including the top shelf.

Figure 250. Metal shelving units and primary artifact and document boxes in the locked collection storage room.

Artifact Storage

Artifact storage varies according to the project, but minimal standards are always applied. The material is processed and accessioned according to NCOSA protocols. At the time of the St. Louis District's visit, about 30% of the artifacts were stored within acidic cardboard boxes. However, after processing, material is stored within archival boxes. These boxes are folded and have telescoping lids. Each box is labeled with an acid free insert that is computer generated. Contractor, project, site number, and contents are generally included on the labels. Secondary containers are directly labeled plastic 4-mil zip-lock bags. Although varied, these labels generally included project and site number. Tertiary plastic zip-locks are labeled with additional provenience information both directly and with acid-free inserts. All artifacts (Table 349) are cleaned and sorted by provenience and material class. Additionally, about half of artifacts are directly labeled with site and specimen number.

Human Skeletal Remains

No DoD skeletal remains are curated at TRC Garrow and Associates.

Records Storage

The documentation (Table 350) is either stored within boxes (both archival and nonarchival, as described above) or loose on staff personnel desks. Any material that is not boxed archivally is still in process. This material is all processed prior to boxing for transfer, although some of this is placed directly within the archival artifact storage boxes. Within these boxes, the material is stored by type in either plastic or paper binders that have adhesive labels. A duplicated archival copy of all paper documentation is produced prior to transfer of the

Table 349.
Percentage by Volume of DoD Artifacts Housed at TRC Garrow and Associates

Material Class	Camp Lejeune Marine Corps Base	Fort Bragg
Lithics	4.6	17.3
Historic Ceramics	4.8	0.8
Prehistoric Ceramics	40.3	3.3
Fauna	1.3	0.0
Shell	4.4	0.0
Botanical	0.0	0.0
Flotation	2.2	0.0
Soil	0.0	0.0
^{14}C	0.2	0.0
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.0
Worked Bone	0.0	0.0
Brick	2.6	0.9
Metal	5.0	1.4
Glass	5.0	3.2
Textile	0.0	0.0
Other (plastic and wood)	2.6	0.1
Total	73.0	27.0

material. At the time of the St. Louis District's visit, much of the material was still in process and located on staff personnel desks. Not all duplicate copies had been produced. Much of the paper and map material was loose, although some was located in folders. Folders are inconsistently labeled. Photographic material is generally within its original form; that is, within the envelopes received after processing or in plastic slide boxes.

Paper Records

The paper records comprise the approximately 4.18 linear feet. This includes administrative and background records, as well as survey, excavation, and analysis records.

Table 350.
Linear Footage of DoD Associated Documentation Housed at TRC Garrow and Associates

Materials	Camp Lejeune Marine Corps Base	Fort Bragg
Paper	2.18	2.00
Reports	0.00	0.00
Oversized*	0.96	0.00
Audiovisual	0.00	0.00
Photographic	2.21	1.50
Computer	0.05	0.00
Total	5.40	3.50

* Includes maps and other oversized documents.

Maps

The majority of the maps are stored loose on the various staff desks/areas during the processing. These will be archivally packaged for transfer to the permanent repository.

Photographs

Photographs comprise 3.71 linear feet and consist of both color and black/white prints, negatives, slides, and contact sheets.

Computer Records

Two three and one-half inch computer disks are included among the record collections. They are stored loosely with the other collections.

Collections Management Standards

TRC Garrow and Associates is not a permanent curation repository and does not have a comprehensive curation plan. However, when preparing materials for long-term curation they follow policies and guidelines established by the state that will ultimately curate the collections.

Comments

1. Artifacts should be processed according to federal standards.

2. Permanent repositories are required for all DoD archaeological collections.

Recommendations

1. Unprocessed artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of the unduplicated paper records.

3. Permanent curation repository(ies) should be identified for the transfer and long-term care of the DoD collections that have not been designated a final repository.

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University of North Carolina

Chapel Hill, North Carolina

Repository Summary

Volume of Artifacts: 5.61 ft^3

Collection Origin: Cherry Point Marine Corps Air Station, North Carolina

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: None

Human Skeletal Remains: None

Assessment

Date of Visit: February 24 and March 3, 1999

Point of Contact: Dr. Trawick Ward, Research Archaeologist

The Research Laboratories of Archaeology (RLA) at the University of North Carolina, Chapel Hill (UNC, Chapel Hill) were established in 1939 to conduct studies in archaeology and related field such as ethnography, physical anthropology, and ethnohistory. In addition to research, teaching, and public outreach, the RLA serves as a repository to almost 80,000 ft^3 of archaeological holdings. In 1998, the St. Louis District visited RLA for another project. At that time, detailed repository and collections management data were collected (St. Louis District, in press). During the 1999 visit, St. Louis District personnel did not reevaluate the facility, and the building information below is taken from the earlier data. However, all information regarding the DoD collections was attained by the 1999 assessment team. Currently, collections from one DoD facility are stored at RLA (Table 351).

Table 351.
Volume of DoD Archaeological Collections Housed at University of North Carolina-Chapel Hill

Installation	Archaeological Materials (ft^3)	Records (linear feet)
MCAS Cherry Point	5.61	—
Totals	5.61	—

Repository

RLA occupies space in two campus buildings. The bulk of the archaeological collections, including all DoD collections, are stored in the stacks on the seventh floor of Wilson Library on campus. Built in the 1930s, Wilson Library originally served as the main library for UNC, Chapel Hill. In 1977, a nine-level stacks structure was added to the rear of the original building. In the early 1980s, the university constructed a new library building to serve as the main campus library and Wilson Library was designated as the special collections library. The

original 1930s portion of the building is a concrete frame structure with a limestone exterior. The stacks levels are constructed of a concrete slab floor system supported by the structural columns of the steel shelving system. The exterior walls are a limestone veneer similar to the original portion of the building. Two similar stacks areas are divided by an elevator core and a central reading area. The UNC, Chapel Hill infrastructure provides heated and chilled water to the building. Multiple air handler units (AHUs) adequately deliver treated air throughout Wilson Library. Because of the delicate nature of the library's special collections, the university changes the standard air filters at each AHU on a regular basis. Humidity is not monitored or controlled. Wilson Library is not equipped with an automatic fire suppression system. Fire extinguishers are located throughout the facility, but have not been inspected within the last year. Heat and smoke sensors, manual pull fire alarms, and audio/strobe alarms are located throughout the building. Access to the stacks levels is highly restricted. Furthermore, the RLA's seventh level stacks area is restricted to pertinent staff. A sophisticated security system is in place on the seventh level, including intrusion alarms and motion detectors that remain from the former fine arts storage use of the seventh level space. However, this security system is not activated.

Collections Storage Area

The RLA occupies the entire seventh floor stacks area, including a total of 6,400 ft^2 of collections storage space, and approximately 2,000 ft^2 of laboratory processing area arranged in the central reading space. The RLA estimates that approximately 15% of the collections storage area is available for additional collections. The stacks level is not maintained by the university and was notably dusty. Collections are stored on the metal library shelving units. Each shelf within the unit measures 17 x 36 x 10 (inches, d x w x h), and the units are eight shelves high and of various lengths. The security and fire systems are as described above for the repository. The south facing windows are secured and not opened. There are curtains on these, but they are not drawn. Fluorescent bulbs have ultraviolet filters.

Artifact Storage

The material is sorted and catalogued by material type. Primary containers consist of acidic cardboard boxes that are folded and either taped or stapled. Some boxes exhibit compression, tearing, and water damage (the water damage occurred prior to collections being transferred to this repository). Each box (18.25 x 12.5 x 8.25, inches, d x w x h) is given a number, and its aisle location and box inventory is entered into the computer database. Direct pencil and pen labeling on the boxes list catalog and site numbers within the box. Secondary containers are heavy-duty paper bags. These are variously labeled, but always contain site and catalog number. Newsprint is occasionally used to separate the site numbers within the box. The majority of boxes are very full, although the DoD material within each box is limited. All artifacts (Table 352) are cleaned and about 60% are directly labeled in marker.

Table 352.
Percentage by Volume of DoD Artifacts Housed at the University of North Carolina-Chapel Hill

Material Class	MCAS Cherry Point
Lithics	39.8
Historic Ceramics	0.0
Prehistoric Ceramics	39.8
Fauna	20.0
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
14C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	0.0
Metal	0.4
Glass	0.0
Textile	0.0
Other	0.0
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated at UNC, Chapel Hill.

Record Storage

There are no DoD associated records curated at UNC, Chapel Hill.

Collections Management Standards

The University of North Carolina is a long-term curation facility, and as such, has written policies that address specific aspects of archaeological curation.

Comments

1. Artifacts are in need of processing in order to comply with federal requirements.

2. The security system in the collections area should be activated to ensure adequate intrusion detection and deterrence.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Initiate a program for pest management including monitoring, preventive measures, and mitigation.

3. Install appropriate systems to monitor and control humidity.

4. Upgrade fire detection and suppression system to include a sprinkler/suppression system.

5. Activate the security system on the seventh floor.

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Cleveland State University

Department of Anthropology
Cleveland, Ohio

Repository Summary

Volume of Artifacts: 4.47 ft^3

Collection Origin: Ravenna Army Ammunition Plant, Ohio

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.5 linear feet

Collection Origin: Ravenna Army Ammunition Plant, Ohio

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: June 7, 1999

Point of Contact: Dr. Jeffery Williams, Anthropology Department Chair

In 1982 an archaeological reconnaissance project was performed on Ravenna Army Ammunition Plant by the Cultural Resources Research Laboratory at Cleveland State University. Archaeological material recovered from this project are stored at the Department of Anthropology, Cleveland State University. An additional archaeological project performed on Ravenna Army Ammunition Plant in 1993 by the archaeological contract firm of Archaeological Services Consultants are also stored at the Anthropology Department at Cleveland State University. Approximately 4.47 cubic feet and 0.5 linear feet of Ravenna Army Ammunition Plant archaeological collections and associated documentation are housed in the Anthropology Department at Cleveland State University.

Repository

The Department of Anthropology is located in the Chester Building, a 1940s university building on the campus of Cleveland State University. Chester Building houses classrooms, offices, and laboratory space (Figure 251). This structure is a brick two-story building with a concrete foundation and a flat built-up asphalt roof that has been replaced within

Figure 251. Exterior of Chester Building where the Department of Anthropology is located.

the last two years. The Department of Anthropology occupies the southeastern portion of the first floor of this building.

Collections Storage Areas

The Ravenna Army Ammunition Plant archaeological collections are stored in two locations. The first is a metal cabinet in Room 115C, a 126 ft^2 storage room that is located off the osteology laboratory/classroom (Figure 252). Both artifacts and records are stored here. The room has a linoleum tile flooring, concrete block interior walls, and a suspended acoustical tile ceiling. Within this room there is one locked window which is covered with a venetian blind. There is no lock on the door to the collections storage room, however, the osteology laboratory/classroom is only entrance to the storage room and it is kept locked. Activities within the collection storage area include the permanent storage of the two Ravenna Army Ammunition Plant archaeological collections and storage of some of the Department of Anthropology records. Currently less than 25% of the available storage space is being utilized by the archaeological collections.

Figure 252. The collection storage room.

The second storage area is Room 122, which is similarity constructed as Room 115C. However, it is kept locked and has no windows. Environmental controls are maintained in both areas by radiant heat and central air-conditioning. Fire protection within the entire building consists of a sprinkler/ suppression system and a fire alarm system wired into the fire department. The university provides a program for pest management, including regularly scheduled spraying, for the collection storage areas, resulting in no reported infestation.

Artifact Storage

Artifacts from Ravenna Army Ammunition Plant (Table 353) are stored in a 72 x 18 x 36 (inches, h x d x h) metal cabinet in four archival Hollinger boxes measuring 15.25 x 12.5 x 10 (inches, d x w x h). Two boxes have adhesive typed labels with the following information: Ravenna Arsenal, 33TR151 – 33TR162 (Accession # 1-12), Box # of 2. The remaining two boxes are directly labeled in marker "Handle with Care, Artifacts # 1 & 2" and have adhesive notes attached with "13-192–13-248" written on them.

Table 353.
Percentage by Volume of DoD Artifacts Housed at Cleveland State University

Material Class	Ravenna Army Ammunition Plant
Lithics	0.0
Historic Ceramics	60.0
Prehistoric Ceramics	0.0
Fauna	1.3
Shell	5.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	0.0
Metal	5.0
Glass	25.0
Textile	0.0
Other (leather and flooring tile)	3.7
Total	100.0

These two directly labeled boxes have been damaged by a water-induced collapsed ceiling in their previous location (Figure 253). Within all four boxes, the collections are stored in 4-mil plastic zip-lock bags, which have been directly labeled in marker. An additional lining of ethafoam padding is in place in two boxes. Secondary containers in two boxes are directly labeled with site number catalog number and provenience, and in the other two boxes, the date and bag number are also included on the labels. The majority artifacts have been thoroughly cleaned and directly labeled with site number over catalog number. Metal objects are the only exception to this: some metal remains unwashed and have nonarchival paper tags with site number and catalog number placed with them in place of direct labeling.

Figure 253. Water damaged primary containers containing Ravenna Army Ammunition Plant artifacts.

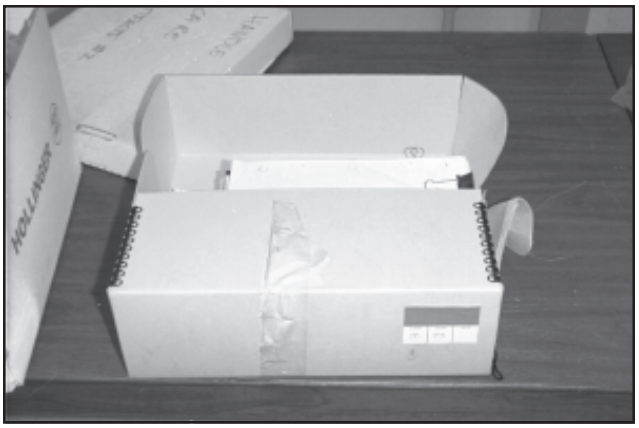

Figure 254. Damaged primary container containing associated documentation from Ravenna Army Ammunition Plant.

Human Skeletal Remains

No DoD human skeletal remains are curated at Cleveland State University.

Records Storage

The Ravenna Army Ammunition Plant associated documentation is currently housed in two locations in the Department of Anthropology at Cleveland State University. The records total approximately 0.5 linear feet (Table 354). Records generated by the project performed by Archaeological Services Consultants are kept in a slightly damaged archival records box in the metal cabinet alongside the archaeological collections in Room 115C (Figure 254). Large maps and aerial photographs from the Cultural Resources Research Laboratory project have been placed in a metal map case in Room 122 (Figure 255).

Table 354.
Linear Footage of DoD Associated Documentation Housed at Cleveland State University, Cleveland, Ohio

Materials	Ravenna Army Ammunition Plant
Paper	0.23
Reports	0.17
Oversized*	0.08
Audiovisual	0.00
Photographic	0.02
Computer	0.00
Total	0.50

* Includes maps and other oversized documents.

Figure 255. Maps of Ravenna Army Ammunition Plant located in a map case.

Paper Records

Paper records comprise approximately 0.23 linear feet of the collection. Included in this are background research materials and field records. The overall condition of these paper records is good, however, they have not been archivally processed. Contaminants such as staples and binding clips are found within the collection.

Reports

Included in the archival records box for Ravenna Army Ammunition Plant are copies of cultural resources reports, totaling approximately 0.17 linear feet. They are in good condition.

Maps

Ravenna Army Ammunition Plant blue line engineering maps are lying loose in a map case in Room 122. These maps have not been archivally processed, and some have been folded for storage purposes.

Photographs

A small amount of large aerial photographs of Ravenna Army Ammunition Plant is found with the maps in the map case.

Collection Management Standards

Cleveland State University currently has no written policy for archaeological collections management.

Comments

Prior to the June 1999 inspection of the collections at Cleveland State University, it was believed that 27 ft^3 of archaeological materials from cultural resources projects on Ravenna Army Ammunition Plant where stored at this facility. As a result of this assessment, only 4.5 ft^3 of collections were located. All possible storage locations known to the repository point of contact were examined in search of the missing collections.

Recommendations

1. Artifacts require (a) bagging in appropriately labeled archival primary and secondary containers and (b) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, and (d) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

The following are recommended if Cleveland State University plans to remain the permanent curation facility for these materials:

1. Install appropriate systems to monitor and control humidity.

2. Upgrade fire detection and suppression system to include fire extinguishers, manual fire alarms, and smoke and heat detectors.

3. Additional security measures should be taken including (a) controlled access and (b) installation of an intrusion alarm system.

6. Create a comprehensive curation policy.

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Archaeological and Historical Consultants

Centre Hall, Pennsylvania

Repository Summary

Volume of Artifacts: None

Linear Feet of Records: 2.33 linear feet

Collection Origin: Carlisle Barracks, Pennsylvania

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: September 2, 1998

Point of Contact: Pam Richardson, Laboratory Director

Archaeological and Historical Consultants, located in Centre Hall, Pennsylvania, conducts archaeological investigations throughout the state. Approximately 2.33 linear feet of Department of Defense (DoD) associated documentation from projects conducted on Carlisle Barracks, Pennsylvania, are housed at the firm.

Repository

The main collections repository is a converted garage that serves as the laboratory for the firm (Figure 256). The foundation is concrete, and the building frame is wood, with plasterboard interior walls. The structure is privately owned. External walls of the repository are constructed of wood with siding, and the roof is shingled. The repository encompasses 600 ft^2 and has space for analysis of artifacts and examination of documents.

Figure 256. Exterior of the laboratory.

Collections Storage Area

The collections from Carlisle Barracks are permanently housed in a commercial storage container that encompasses approximately 150 ft^2 (Figure 257). The floor of the storage area is

Figure 257. Exterior of the storage unit.

concrete, and the interior walls are corrugated metal. The ceiling is also metal and there are no windows in the container. Activities in the collections storage area include only permanent storage of artifacts and records. Collections present in the area are archaeological in nature and currently occupy approximately 25% of the container. There are no environmental controls in the storage area and security consists of a pad lock on the door and a locked fence that encircles the compound. The container has no pest management or fire protection measures. No evidence of infestation was noted during the assessment.

Artifact Storage

No DoD artifacts are curated at Archaeological and Historical Consultants.

Human Skeletal Remains

No DoD human skeletal remains are curated at Archaeological and Historical Consultants.

Records Storage

Records from Carlisle Barracks encompass approximately 2.3 linear feet (Table 355). All records are stored in acidic cardboard boxes, 16 x 13 x 10.5 (inches, d x w x h) in the collections area.

Table 355.
Linear Footage of DoD Associated Documentation Housed at Archaeological and Historical Consultants

Materials	Carlisle Barracks
Paper	0.58
Reports	1.33
Oversized*	0.17
Audiovisual	0.00
Photographic	0.25
Computer	0.00
Total	2.33

* Includes maps and other oversized documents.

Individual files are stored in manila folders that are directly labeled in marker. Records are stored with other materials from projects conducted by the firm. There is no area that is specifically set aside for records.

Paper Records

Paper records comprise approximately 0.58 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection, but as a whole, materials are in good condition.

Reports

Reports encompass approximately 1.33 linear feet and are stored in the same manner as the paper records.

Photographs

Photographs encompass 0.25 linear feet of the collection and are stored with paper records in manila folders.

Maps

Maps encompass 0.17 linear feet of the collection and are stored with paper records in manila folders.

Collections Management Standards

Archaeological and Historical Consultants is not a permanent curation repository and does not have a comprehensive curation plan. However, when preparing materials for long-term curation they follow policies and guidelines established by the state that will ultimately house the collections.

Comments

1. Records are arranged by project and file folders are labeled in a consistent manner.

2. There is no pest management plan.

3. There are no fire protection measures or environmental controls.

Recommendations

1. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) storage of maps in an archival flat file, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

2. Complete arrangements for the transfer of the DoD archaeological collection.

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John Milner Associates, Inc.

West Chester, Pennsylvania

Repository Summary

Volume of Artifacts: 6.47 ft^3

Collection Origin: Navy Ships Parts Control Center, Pennsylvania; Frankford Arsenal, Pennsylvania

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.17 linear feet

Collection Origin: Navy Ships Parts Control Center, Pennsylvania

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: June 28, 1999

Point of Contact: Juliette Gerhardt, Laboratory Director

John Milner Associates (JMA) is a private consulting business. The firm does not consider itself a permanent repository for Department of Defense (DoD) collections; the collections are held until arrangements can be made for transfer to a long-term curation repository. Currently, approximately 6.47 ft^3 of artifacts from two DoD installations and 0.17 linear feet from one DoD facility are stored at JMA (Table 356).

Table 356.
Volume of DoD Archaeological Collections Housed at John Milner Associates

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Frankford Arsenal	6.14	—
Navy Ships Parts Control Center	0.33	0.17
Totals	6.47	0.17

Repository

JMA occupies a restored nineteenth century private home. The residence was originally completed in 1867 (Figure 258). In the 1930s, the property was donated to the Barclay Home Corporation, and was converted into a boarding house, and later, a retirement home. In 1998, JMA converted and renovated the building into professional offices. Within the building, there are two areas, which currently house archaeological collections, a closet on the first floor and a basement storage area.

Collections Storage Areas

On the first floor of the building, archaeological collections from Navy Ships Parts Control Center are temporarily stored within a closet (Figure 259).

Figure 258. The entrance to building that contains the offices of John Milner and Associates.

Figure 259. A closet on the first floor is used to temporarily store artifacts prior to moving the artifacts to the basement.

Upon completion of the project, the collection will be transferred to the basement storage repository. The closet, measuring 15 x 35 x 106 (inches, d x w x h), has four wood shelves. The closet door has a key lock, but it is not routinely locked. Access to the building, however, is limited to JMA staff. The room in which the closet is located has a tile floor and plaster walls. Central air-conditioning and heat provide temperature control for the room, but the fluctuation is not monitored. The room has a tile floor and plaster walls. Fire protection within the room consists of a sprinkler system, smoke detector, and a fire alarm. Pest management is conducted on an as-needed basis.

Room B-10, a basement room, serves as a second storage area. Once projects are complete, artifacts are stored in this room until their transfer to a permanent long-term repository. Room B-10, measures approximately 865 ft^2, has a concrete floor and concrete walls. It is accessed through a key locked door. The ceiling is made of plaster. Only a few of the more than seven windows are covered by blinds, but all are secured. There are numerous overhead pipes. Open, nonmovable, metal shelving units are used to hold the artifact boxes. In addition to central air-conditioning and heating, humidity is also controlled. Fire protection in Room B-10 consists of a sprinkler system. Outside of Room B-10, a fire extinguisher (inspected in May 1999) and fire alarm provide additional protection.

Artifact Storage

A single box of artifacts from Navy Ships Parts Control Center (Table 357) (12.25 x 8.5 x 5.5, inches, d x w x h) is stored within the closet. The box is archival with metal corners and a telescoping lid. Taped with masking tape on the outside of the box is a nonarchival paper label recording the project and date. Twist-tied 4-mil plastic bags serve as secondary containers, which are nested with similar tertiary bags. The secondary containers are labeled directly in marker with the site number, provenience, site name, project, date and investigator. Tertiary containers contain nonarchival paper inserts with additional provenience information. All of the artifacts are cleaned and sorted by provenience. Less than 10% of the artifacts are directly labeled.

Table 357.
Percentage by Volume of DoD Artifacts Housed at John Milner Associates

Material Class	Frankford Arsenal	Navy Ships Parts Control Center
Lithics	4.7	0.0
Historic Ceramics	7.1	2.6
Prehistoric Ceramics	0.0	0.0
Fauna	5.5	1.0
Shell	2.4	0.3
Botanical	3.2	0.0
Flotation	0.0	0.0
Soil	0.0	0.0
^{14}C	0.0	0.0
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.0
Worked Bone	3.2	0.0
Brick	11.1	0.0
Metal	47.3	1.3
Glass	6.3	0.0
Textile	0.8	0.0
Other (slate)	3.2	0.0
Total	94.8	5.2

Figure 260. The basement room, B-10, where all artifacts are stored prior to thembeing transferred to a permanent curation repository.

On one shelving unit in Room B-10, artifacts from Frankford Arsenal (Table 357) are stored within five folded, archival boxes with telescoping lids (15.75 x 12.75 x 10.5, inches, d x w x h). Additionally, a large metal object (21.0 x 13.5 x 0.25, inches, d x w x h) was stored in plastic, twist-tied bag on the shelving unit (Figure 260). Except for one directly labeled box, the boxes are labeled with taped on nonarchival paper. Secondary containers varied between plastic zip-locked or twist-tied bags, white cloth bags with string closures, and plastic sheeting. Labeling on the secondary containers varied according to the container type: direct marker labeling for the plastic bags, sewn on yellow tags for the cloth bags, and paper tags attached with a string for the plastic sheeting. Although inconsistent, the labels generally contained the project, provenience, date, and investigator. Approximately 50% of the artifacts require additional cleaning, and none of the artifacts are directly labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at John Milner Associates.

Records Storage

Approximately 0.17 linear feet of documents from Navy Ships Parts Control Center are located at JMA (Table 358). The collection consists administrative and field records. The material does not have a specific storage area. They are kept in the office of the project researcher and will be stored with the objects upon completion of the project.

Table 358.
Linear Footage of DoD Associated Documentation Housed at John Milner Associates

Materials	Navy Ships Parts Control Center
Paper	0.04
Reports	0.13
Oversized*	0.00
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.17

* Includes maps and other oversized documents.

Paper Records

Paper material at JMA consists of 0.04 linear feet of administrative and field records located in a manila folder.

Reports

One report copy is located at the repository (0.13 linear feet).

Collections Management Standards

John Milner and Associates is not a permanent curation repository and does not have a comprehensive curation plan. However, when preparing materials for long-term curation they follow policies and guidelines established by the state that will ultimately house the collections.

Comments

A long-term curation repository that meets 36 CFR Part 79 standards is required for all DoD collections.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) packaged in appropriately labeled archival primary and secondary containers, (b) creation of a finding aid, (c) creation of an archival duplicate copy of paper records, and (d) storage of archival paper copies in a separate, fire-safe, and secure location.

3. Identify a permanent repository (ies) for the transfer of the DoD archaeological collections.

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The State Museum of Pennsylvania

Harrisburg, Pennsylvania

Repository Summary

Volume of Artifacts: 1.71 ft^3

Collection Origin: Letterkenny Army Depot, Pennsylvania

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.8 linear feet

Collection Origin: Letterkenny Army Depot, Pennsylvania

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date Of Visit: August 31 and September 1, 1998

Point of Contact: Janet Johnson, Curator

The State Museum of Pennsylvania, located in Harrisburg, Pennsylvania, serves as the state repository for the majority of archaeological collections generated in the eastern portion of the state. Approximately 1.71 ft^3 and 0.8 linear feet of Department of Defense (DoD) associated documentation from projects conducted on Letterkenny Army Depot, are housed at the museum.

Repository

The main collections repository is a multi-level structure that holds offices, exhibit space, laboratories, and storage areas (Figure 261). This structure is 35 years old and has always been a museum. The foundation is concrete, and the building frame is steel with plaster interior walls. External walls of the repository are constructed of concrete block and the roof is built-up asphalt. The repository encompasses 20,000 ft^2.

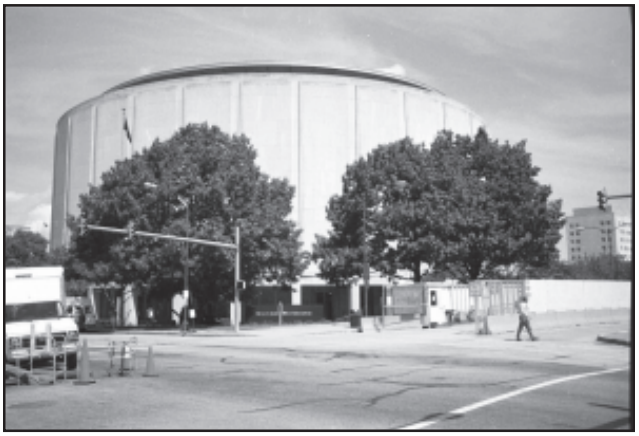

Figure 261. Exterior of the museum building.

Collections Storage Areas

Artifacts and records are stored in two different areas. All artifacts from Letterkenny Army Depot are stored in a circular-shaped alcove that is located off one of the larger, second floor exhibit areas (Figure 262). The area encompasses approximately 350 ft^2 and has a concrete floor that is carpeted. Interior walls are concrete block, the ceiling is concrete, and there are no windows. The only activities in the area consist is the permanent storage of archaeological material. The alcove is currently at 75% capacity. The storage area has central air

Figure 262. Collections from Letterkenny Army Depot, Pennsylvania, collections are stored in an alcove.

condtioning and heating. Like the rest of the repository, this collections storage area is serviced by an intrusion alarm, dead-bolt locks on the door, controlled access, security cameras, and a 24-hour guard. There was no visible fire security in the storage area, however, fire alarms, smoke and heat detectors, and sprinkler units were noted just outside the alcove.

All records from Letterkenny Army Depot projects are stored in the Section of Archaeology, Room 414. The floor and ceiling in this area is concrete and the interior walls are concrete block. There are no windows and the room encompasses approximately 3,000 ft^2. Room 414 is used as laboratory space, artifact and record study space, offices, and photograph and record storage. Room 414 houses only archaeological collections and is currently at 100% capacity. Like the rest of the museum, the records storage has central air conditioning and heat. It is serviced by an intrusion alarm, dead-bolt locks, controlled access, security cameras, and a 24-hour guard. Fire security consists of a sprinkler system, smoke detectors, fire extinguishers, and a fire alarm wired to the fire department.

Artifact Storage

Artifacts from Letterkenny Army Depot are stored on metal shelving units in an acidic cardboard box that measures 17.5 x 13 x 13 (inches, d x w x h). The box is secured with tape (Figure 263). Within the box, collections are stored in plastic bags that are secured with twist-ties and in small acidic boxes. Artifacts encompass approximately 1.71 ft^3 (Table 359), are sorted by site number, and have been cleaned and directly labeled.

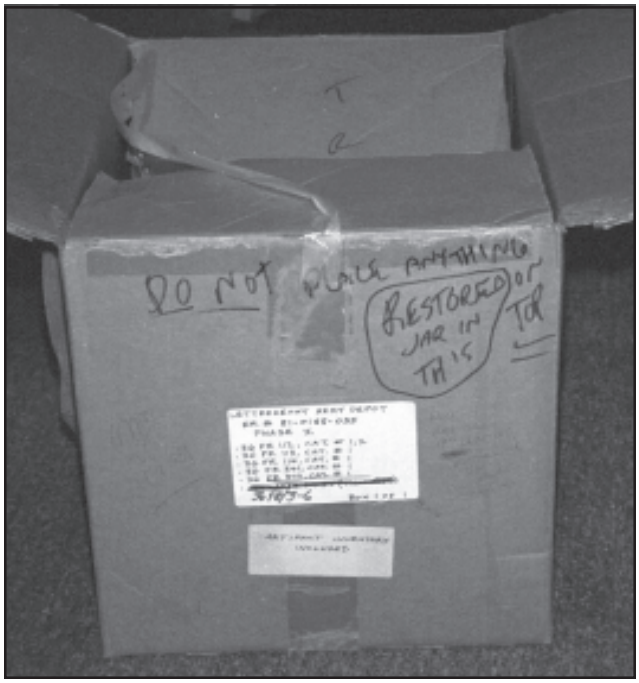

Figure 263. The front of the box containing the Letterkenny Army Depot, Pennsylvania, collections.

Table 359.
Percentage by Volume of DoD Artifacts Housed at the State Museum of Pennsylvania

Material Class	Letterkenny Army Depot
Lithics	15
Historic Ceramics	75
Prehistoric Ceramics	0
Fauna	0
Shell	0
Botanical	0
Flotation	0
Soil	0
^{14}C	0
Human Skeletal	0
Worked Shell	0
Worked Bone	0
Brick	0
Metal	0
Glass	10
Textile	0
Other	0
Total	100

Human Skeletal Remains

No DoD human skeletal remains are curated at the State Museum of Pennsylvania.

Records Storage

Records from Letterkenny Army Depot encompass approximately 0.8 linear feet (Table 360). All records are stored in metal drawers that measure 28 x 18 x 10.5 (inches, d x w x h). Individual files are stored in manila folders that are directly labeled in marker. Records are stored with other materials from projects conducted by the firm. There is no area that is specifically set aside for records.

Table 360.
Linear footage of DoD Associated Documentation at the State Museum of Pennsylvania

Materials	Letterkenny Army Depot
Paper	0.04
Reports	0.00
Oversized*	0.00
Audiovisual	0.00
Photographic	0.04
Computer	0.00
Total	0.08

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 0.4 linear feet. Some contaminants, such as paper clips and staples, were noted throughout the collection, but on a whole, materials are in good condition.

Photographs

Photographs encompass 0.4 linear feet of the collection and are stored with paper records in manila folders.

Collections Management Standards

The State Museum of Pennsylvania is a permanent curation repository and has a comprehensive curation plan that must be used by contractors submitting collections. The plan encompasses permanent storage procedures for artifacts, documents, and photographs.

Comments

Artifacts and records are arranged by project and are labeled in a consistent manner.

Recommendations

1. Artifacts require (a) placement in appropriately labeled archival primary and secondary containers and (b) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies in a separate, fire-safe, and secure location.

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Public Archaeological Laboratory, Inc.

Pawtucket, Rhode Island

Repository Summary

Volume of Artifacts: 26.34 ft^3

Collection Origin: Fort Devens, Massachusetts; Hanscom Air Force Base, Massachusetts; Massachusetts Military Reservation, Massachusetts; 94th ARCOM (New England States), Watertown Arsenal, Massachusetts, and Westover Air Force Base, Massachusetts.

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 10.19 linear feet

Collection Origin: Fort Devens, Massachusetts; Hanscom Air Force Base, Massachusetts; Massachusetts Military Reservation, Massachusetts; 94th ARCOM (New England States), Watertown Arsenal, Massachusetts; Westover Air Force Base, Massachusetts; Detroit Arsenal, Michigan; New Boston Air Force Base, New Hampshire; Picatinny Arsenal, New Jersey; Brooklyn Naval Station, New York, Charleston Naval Field, Rhode Island; and USAF Ground-Wave Emergency Network Transmission Site, Rhode Island.

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: October 22, 1998

Point of Contact: Madonna Raymond, Laboratory Manager

The Public Archaeology Laboratory has performed 38 archaeological projects on Department of Defense (DoD) facilities throughout the Northeastern United States. Approximately 26.34 ft^3 and 10.19 linear feet of DoD archaeological collections and associated documentation from 19 DoD facilities are maintained at Public Archaeological Laboratory's on-site artifact storage repository (Table 361).

Table 361.
Volume of DoD Archaeological Collections Housed at The Public Archaeology Laboratory

Installation	Archaeological Materials (ft^3)	Records (linear feet)
94th ARCOM – New England States	0.12	0.83
Army Materials Technology Laboratory – Watertown Arsenal	1.43	1.07
Naval Station Brooklyn	—	0.55
Charleston Naval Field	—	0.27
Detroit Arsenal	—	0.29
Fort Devens	23.19	3.32
Hanscom Air Force Base	0.17	0.72
Massachusetts Military Reservation	1.20	1.09
New Boston Air Force Base	—	1.33
Picatinny Arsenal	—	0.40
U.S. Air Force Ground-Wave Emergency Network	—	0.06
Westover Air Force Base	0.23	0.26
Totals	26.34	10.19

Figure 264. Exterior of the Public Archaeological Laboratory office.

Repository

The Public Archaeology Laboratory maintains an on-site artifact storage repository at their offices at 210 Lonsdale Ave., Pawtucket, Rhode Island (Figure 264). Constructed in 1980, the building was originally designed as medical office space. Today it has all the necessary components for this cultural resources firm. The design is a two and a half story building with a concrete foundation and exterior walls of brick. The roof, replaced within the last year, is of a flat construction with a rubber coating. The bottom floor of the building, approximately 3,000 ft^2, is devoted to collections management support services and collection storage.

Collections Storage Area

The DoD collections are permanently housed in three different rooms on the first floor of the repository, the artifact room, files room, and map storage room, and in one area on the second floor, the "photo area." The combined collection storage areas are approximately 950 ft^2. These three rooms are all carpeted, have walls constructed of drywall, and have suspended acoustical tile ceilings with fluorescent light fixtures. Environmental controls are maintained within the repository by forced heat, air conditioning, and humidity controls. The collection storage areas are locked during nonworking hours and are equipped with alarms for both motion and sound detection. There are seven sealed windows covered with vertical binds located in the collection storage areas, two in the file room and five in the artifact room. Fire protection is maintained by a dry carbon dioxide manual fire extinguisher that is kept available within the room artifact room.

Artifact Storage

In the artifact room, artifact collections from six DoD installations are stored in archival boxes on painted nonmovable metal shelving (Figure 265). The archival boxes range in sizes: large 15 x 12.5 x 10, medium 12 x 6 x 4.125, and small 6 x 4 x 4.25 (inches, d x w x h). The large archival boxes have computer generated cards placed in plastic sleeves on the outside, while the medium and small boxes have adhesive computer generated labels directly affixed them. All labels contain the following information: project name, phase, site name, site number, city/town, material type, material box number, storage room number, year, state, and box number. All artifacts (Table 362) have been cleaned. No direct labeling is performed. Instead, artifacts are sorted by site, unit, depth, strata, and material class, placed in individual archival bags with acid-free typed tags.

Figure 265. The collection storage room.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Public Archaeology Laboratory.

Records Storage

The majority of records from projects on DoD installations (Table 363) are kept in the file room in five-drawer file cabinets measuring 15 x 60 x 28.5

Table 362.
Percentage by Volume of DoD Artifacts Housed at the Public Archaeology Laboratory

Material Class	94th ARCOM New England States	Watertown Arsenal	Fort Devens	Hanscom AFB	Massachusetts Military Reservation	Westover AFB
Lithics	0.0	3.2	19.5	0.0	4.4	0.3
Historic Ceramics	0.2	1.2	14.2	0.0	0.0	0.0
Prehistoric Ceramics	0.0	0.0	0.1	0.0	0.0	0.0
Fauna	0.1	0.3	3.0	0.0	0.1	0.0
Shell	0.0	0.0	0.1	0.0	0.0	0.0
Botanical	0.0	0.0	0.3	0.0	0.0	0.0
Flotation	0.0	0.0	0.0	0.0	0.0	0.0
Soil	0.0	0.0	0.0	0.0	0.0	0.0
^{14}C	0.0	0.0	0.6	0.2	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0	0.0	0.0
Brick	0.0	0.2	3.3	0.2	0.0	0.0
Metal	0.1	0.3	31.1	0.0	0.0	0.3
Glass	0.1	0.3	14.2	0.1	0.0	0.3
Textile	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.1	1.5	0.0	0.1	0.0
Total	0.5	5.6	87.9	0.5	4.6	0.9

(inches, d x h x w) (Figure 266). These materials have been sorted into categories (report originals, administrative files, and project notes) and are arranged alphabetically by project title. Project maps, to large to fit in file drawers, have been rolled and placed in the "map case," a set of wooden shelves located in the map room. The maps are roughly organized alphabetically by project. Additionally photographic materials are stored on the middle floor of the building in the "photo area." They are placed in three-ring binders and stored on a nonmovable metal shelf measuring 12 x 60 x 36 (inches, d x h x w). These materials are arranged according to Public Archaeology Laboratory project numbers.

Figure 266. The record storage room.

Paper Records

Overall the condition of the paper records is quite good, however, they are not archivally processed, and finding aids and security copies available are not available.

Reports

Reports are stored in the same manner as the paper records. One exception is the report originals for the 94th ARCOM (New England States) project that are in a non-archival box located on top of the file cabinets.

Maps

Maps too large to be place in file cabinets have been rolled and placed in the "map case" (Figure 267). The condition of these maps is fair, however, their arrangement/organization is poor. The rolled maps have paper tags tied with string attached to one end which identify project names, but many are missing these tags. They are then placed on large shelves very loosely alphabetically organized. One must sift through the map shelves to find maps from particular

Table 363.
Linear Footage of DoD Associated Documentation at the Public Archaeology Laboratory

Installation	Paper	Reports	Oversized*	Audiovisual	Photographic	Computer	Total Linear Footage
94th ARCOM–New England States	0.46	0.33	0.04	0.00	0.00	0.00	0.83
Watertown Arsenal	0.77	0.38	0.04	0.00	0.05	0.00	1.07
Naval Station Brooklyn	0.42	0.08	0.02	0.00	0.03	0.00	0.55
Charleston Naval Field	0.15	0.13	0.00	0.00	0.00	0.00	0.27
Detroit Arsenal	0.04	0.13	0.13	0.00	0.00	0.00	0.29
Fort Devens	1.54	1.20	0.54	0.00	0.04	0.00	3.32
Hanscom AFB	0.41	0.19	0.13	0.00	0.00	0.00	0.72
Massachusetts Military Reservation	0.78	0.23	0.08	0.00	0.00	0.00	1.09
New Boston Air Force Base	0.83	0.33	0.08	0.00	0.08	0.00	1.33
Picatinny Arsenal	0.27	0.06	0.04	0.00	0.02	0.00	0.40
U.S. Air Force Ground-Wave Emergency Network Transmission Site	0.03	0.02	0.01	0.00	0.00	0.00	0.06
Westover AFB	0.08	0.08	0.04	0.00	0.05	0.00	0.26

* Includes maps and other oversized documents.

Figure 267. The map storage area.

project. This action appears to have a detrimental effect on the condition of the documents.

Photographs

Photographic material include slides, color prints, black-and-white prints, contact sheets, and negatives. Overall the condition of the photographic material is excellent. They are archivally processed and filed in the photograph area by Public Archaeology Laboratory project numbers.

Collection Management Standards

All cultural materials are cleaned and stored in accordance with the Rhode Island Historic Preservation and Heritage Commission *Standards for the Conservation and Curation of Archaeological Collections,* revised in November 1984. When received, materials are placed in zip-lock plastic bags with inserted acid-free description/provenience labels and are stored in acid-free boxes. Field forms and notes, photographic material, laboratory forms, database computer disks, reports, and other associated project documentation are also kept on site.

Comments

Although free of insects and rodents there does not appear to be an integrated pest management system for the repository.

Recommendations

1. Artifacts require consistent direct labeling (when applicable).

2. Records require (a) removal of all contaminants, (b) placement of maps in flat metal map cases, (c) creation of a finding aid, and (d) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

3. Initiate a program for pest management including monitoring, preventive measures, and mitigation.

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South Carolina Institute of Archaeology and Anthropology

Columbia, South Carolina

Repository Summary

Volume of Artifacts: 751.2 ft^3

Collection Origin: Beaufort Naval Hospital, South Carolina; Charleston Naval Weapons Station, South Carolina; Fort Jackson, South Carolina; McEntire Air National Guard Base, South Carolina; Myrtle Beach Air Force Base, South Carolina; Parris Island Marine Corps Recruit Depot, South Carolina.

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 59.16 linear feet

Collection Origin: Beaufort Naval Hospital, South Carolina; Charleston Naval Weapons Station, South Carolina; Fort Jackson, South Carolina; McEntire Air National Guard Base, South Carolina; Myrtle Beach Air Force Base, South Carolina; Parris Island Marine Corps Recruit Depot, South Carolina.

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: August 31–September 2, 1998; June 9, 1999

Point of Contact: Sharon Pekrul, Curator, and Keith Derting, Information Management Division Head

The South Carolina Institute of Archaeology and Anthropology serves as an investigative, interpretive, and permanent curation repository for the state of South Carolina. Established as the South Carolina Department of Archaeology by the South Carolina General Assembly, its name was changed in 1967 to the Institute of Archaeology and Anthropology. In 1984 its name was again changed to the current South Carolina Institute of Archaeology and Anthropology (SCIAA) (Drew 1995).

Archaeological collections are curated in the Collections Facility on College Street. Collections in various stages of processing and analyzing are in the Pendleton Building, 1321 Pendleton Street. All associated documentation and records from these collections are located in the Pendleton Building.

SCIAA has been visited by the St. Louis District for three other projects, during which detailed building evaluations were completed (Drew 1995; Marino and Wilzbach 1998; St. Louis District, in press). The current DoD assessment team did not perform and new building evaluation, and information regarding the building below is taken from the previous data. However, all information regarding the DoD collections (Table 364) was gathered by the DoD assessment team.

Table 364.
Volume of DoD Archaeological Collections Housed at the South Carolina Institute of Archaeology and Anthropology

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Beaufort Naval Hospital	0.92	0.13
NWS Charleston	4.60	1.00
Fort Jackson	44.82	2.63
McEntire Air National Guard Base	4.50	0.39
Myrtle Beach AFB	0.89	0.15
Parris Island Marine Corps Recruit Depot	695.47	54.86
Totals	751.20	59.16

Repository

The main collections repository on College Street is a single story structure, 4,750 ft², holding offices, collections, supplies, equipment storage space, and one restroom (Figure 268). The building was built in the early 1970s. The exterior is constructed of bricks and corrugated-metal siding over a metal superstructure. The structure has a poured concrete slab foundation, corrugated metal roof, and no windows. During heavy rains the roof does leak (Drew 1995).

The Pendleton Street building has 23 offices, laboratories, and storage areas (Figure 269). The building is 11,926 ft², has a cement-slab foundation, brick exterior walls, and a flat, new style foam roof which replaced the previous tar and gravel roof in 1997. There are 36 windows with wood shutters or plastic blinds and one display window in the front of the building (Drew 1995).

Figure 269. Exterior of the building on College Street.

Collections Storage Areas

The collections storage area in the College Street building has interior walls of various construction. The east wall is composed of concrete blocks, and the west wall has wire mesh on one side and plywood on the other (Figure 270). The north and south walls are plastic-backed insulation over the metal superstructure. This building has two heaters and two large exhaust fans but no environmental monitoring instruments. There are also three window air-conditioning units on office walls. Nonfiltered fluorescent lighting is present. Water pipes are located above collections, which are stored on rows of enamel metal shelving (Figure 271). A professional pest management company is utilized on a quarterly, or as-needed basis, and cleaning of the College Street building is done every three months and as-needed by the curatorial staff. Entrance to the building is through a dead-bolted,

Figure 268. Exterior of the building on Pendleton Street that contains archaeological collections.

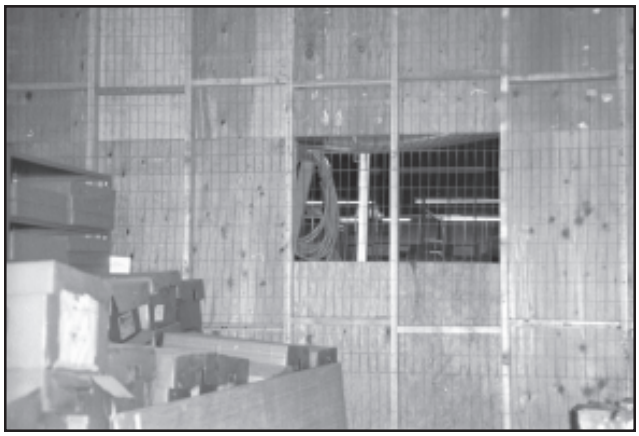

Figure 270. Interior wall construction of the College Street repository.

Figure 271. Metal shelving and interior conditions in the College Street repository.

metal door in the north wall. There are also three interior, hollow-core wood doors. Security consists of an outside chain-link fence, which is locked by university police from 4:00 p.m. to 7:00 a.m. Monday through Friday and on weekends, an intrusion alarm, which is wired to the University of South Carolina police, motion detectors, and keypad access (Marino and Wilzbach 1998). Fire safety includes two fire extinguishers and a wet-pipe sprinkler system (Drew 1995).

A large portion of the archaeological collections are temporarily housed in four rooms within the Pendleton Street building while undergoing laboratory processing and analyzing.

Artifact Storage

Artifacts (Table365) from the Beaufort Marine Corps Air Station and Parris Island Marine Corps Recruit Depot are curated in the College Street building in nonarchival flat boxes of varying sizes that have been specifically made for SCIAA. Artifacts (Table 365)are placed in 4-mil zip-lock bags. These collections have been completely processed or are in various stages of rehabilitation. Artifacts from Charleston Naval Weapons Station, Fort Jackson, McEntire Air National Guard Base, Myrtle Beach Air Force Base, and Parris Island Marine Corps Recruit Depot (tABLE 365) are in the downstairs labs in the Pendleton Street building. They are in nonarchival boxes of varying sizes. The artifacts are in 2- and 4-mil, zip-lock bags, which are nested and labeled with black pen. Some of the artifacts have nonarchival paper label inserts while others are directly labeled, some inappropriately with masking tape. All labels for the Fort Jackson artifacts are to

Table 365.
Percentage by Volume of DoD Artifacts Housed at the South Carolina Institute of Archaeology and Anthropology

Materials	Beaufort Naval Hospital	NWS Charleston	Fort Jackson	McEntire Air National Guard Base	Myrtle Beach AFB	Parris Island Marine Corps Recruit Depot
Lithics	0.0	0.0	2.2	0.0	0.0	0.7
Historic Ceramics	0.0	0.2	0.9	0.2	0.0	18.7
Prehistoric Ceramics	0.0	0.5	1.5	0.0	0.0	8.9
Fauna	0.0	0.0	0.0	0.0	0.0	2.4
Shell	0.0	0.0	0.0	0.0	0.0	10.0
Botanical	0.0	0.0	0.0	0.0	0.0	3.5
Flotation	0.0	0.0	0.0	0.0	0.0	5.3
Soil	0.0	0.0	0.0	0.1	0.0	0.2
^{14}C	0.0	0.0	0.1	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0	0.0	0.0
Brick	0.2	0.1	0.0	0.0	0.0	13.5
Metal	0.0	0.1	0.8	0.2	0.0	9.7
Glass	0.0	0.0	0.8	0.1	0.0	2.0
Textile	0.0	0.0	0.0	0.0	0.0	0.0
Other*	0.0	0.0	0.0	0.1	0.0	17.0
Total	0.2	0.9	6.3	0.7	0.0	91.9

* Other includes buttons, pipestems, plastic, and concretion.

Table 366.
Linear Footage of DoD Associated Documentation at South Carolina Institute of Archaeology and Anthropology

Materials	Beaufort Naval Hospital	NWS Charleston	Fort Jackson	McEntire Air National Guard Base	Myrtle Beach AFB	Parris Island Marine Corps Recruit Depot
Paper	0.08	0.75	1.85	0.33	0.08	36.88
Reports	0.00	0.00	0.00	0.00	0.00	0.00
Oversized*	0.04	0.00	0.27	0.04	0.00	2.54
Audiovisual	0.00	0.00	0.00	0.00	0.00	0.08
Photographic	0.00	0.25	0.50	0.01	0.06	14.56
Computer	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.13	1.00	2.63	0.39	0.15	54.86

* Includes maps and other oversized documents.

be in indelible ink. Many of the artifacts from these installations are awaiting cleaning and processing.

Human Skeletal Remains

No DoD human skeletal remains are curated at the South Carolina Institute of Archaeology and Anthropology.

Records Storage

Records from all of the installations listed above total 59.16 linear feet (Table 366). All records are housed at the Pendleton Street Building in the upstairs laboratory, the records room, and the site files room. The majority of the paper and photographic records are stored in metal file cabinets in nonarchival file folders (Figure 272). The remaining documents are either works in progress, which are stored in three-ring binders, or unprocessed files stored in nonarchival boxes and loose on shelves. Maps are located in a metal map case in the records room, loose in a box of paper records, or in file folders with paper records.

Figure 272. Document storage room at the Pendleton Street repository.

Paper Records

Paper records encompass approximately 39.97 linear feet. No contaminants were noted and all records appear to be in good condition. Documents are organized by project but lack a finding aid and security copy. Collections from Fort Jackson are in the process of being duplicated on archival paper and placed in archival file folders.

Maps

Maps encompass approximately 2.89 linear feet. The majority of the maps are folded and one is torn. Two percent of the maps from the Parris Island Marine Corps Recruit Depot collection are rolled.

Photographs

Photographs encompass approximately 15.38 linear feet. Staples were noted on contact sheets from Parris Island Marine Corps Recruit Depot. Some photographs are placed in nonarchival file folders along with paper records. Negatives are in archival sleeves. Some photographs Parris Island Marine Corps Recruit Depot collection do not have direct labels; however, the slides do possess labels. There are typed inserts in some sleeves. Photographs from Fort Jackson are in the process of being placed in archival sleeves. Photograph logs are available for the Myrtle Beach Air Force Base and the Charleston Naval Weapons Station. The photographic records lack a finding aid.

Audiovisual Records

Audiovisual records from Parris Island Marine Corps Depot encompass approximately 0.88 linear feet. They include six professional videotapes and one VHS videotape.

Collection Management Standards

The South Carolina Institute for Archaeology and Anthropology is a permanent curation facility. No final curation policy has been written, however, SCIAA is using a draft *Curation Standards* (Drew 1995, Marino and Wilzbach 1998).

Comments

1. There are no environmental controls or filtered lighting in the Collections Facility.

2. The fire suppression and security systems in the Pendleton Building are inadequate.

Recommendations

1. Unprocessed artifacts require (a) cleaning, (b) sorting, (c) consistent direct labeling (when applicable), (d) placement in appropriately labeled archival primary and secondary containers, and (e) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of maps in an archival, flat file case, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Install appropriate systems to monitor and control temperature and humidity.

4. Install ultraviolet filters on the lights and appropriate systems to monitor and control dust, humidity, and temperature in Collection Facility.

5. Upgrade fire detection and suppression system in the Pendleton Building.

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DuVall and Associates, Inc.

Franklin, Tennessee

Repository Summary

Volume of Artifacts: 3.36 ft^3
Collection Origin: Fort Campbell, Kentucky
Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 1.48 linear feet
Collection Origin: Fort Campbell, Kentucky
Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: December 9, 1998

Point of Contact: J. Stephen Yates, Archaeologist

DuVall and Associates, located in Franklin, Tennessee, does not serve as a permanent repository for Department of Defense (DoD) collections. However, approximately 3.36 ft^3 of artifacts and 1.48 linear feet of documentation from Fort Campbell are currently located at DuVall and Associates. As of the date of the St. Louis District assessment the final disposition of the collection had not been determined. According to Mr. Yates, the material would most likely be transferred to Fort Campbell upon completion of the final report.

Repository

DuVall and Associates occupy space in a converted doctor's office building built in the 1970s (Figure 273). Both the foundation and the walls of the building are concrete. The outside door has key and dead-bolt locks, and keys are limited to the company personnel. There is a large reception area upon entry, and the various offices and storage space are located off of a main hallway. A portion of the main hallway serves as a kitchen area.

Figure 273. Exterior of the building that contains the offices of DuVall and Associates.

Collections Storage Area

The collections from Fort Campbell are temporarily being stored within Mr. Yates' office (Figure 274). The room, approximately 160 ft^2, has a carpeted floor, drywall interior walls, and a plaster ceiling. The one window in the office does not open and is covered with blinds. The office door has a keyed lock. The only fire protection in the repository consists of a fire extinguisher located near the kitchen area. There is no program for pest management, but no infestation was apparent. The DoD collections are being stored in boxes that are stacked on the floor near the office door. There is little space in the office for any additional storage.

Figure 274. Collections from Fort Campbell, Kentucky, are located on the office floor.

Artifact Storage

The artifacts (Table 367) are stored in three acid-free boxes, each measuring 15.5 x 12.5 x 10 (inches, d x w x h). The boxes are folded and covered with a telescoping lid; slight compression damage is evident on one box (Figure 275). Each box is labeled directly in marker with the installation name. Except for two paper bags, all material is stored in plastic zip-lock bags. Each zip-lock bag is consistently labeled with project, provenience and date; tertiary zip-lock bags nested within these are also directly labeled. The majority of artifacts are cleaned and sorted by provenience. Approximately 50% of the artifacts are directly labeled in maker with provenience information.

Table 367.
Percentage by Volume of DoD Artifacts Housed at DuVall and Associates

Material Class	Fort Campbell
Lithics	68.4
Historic Ceramics	13.3
Prehistoric Ceramics	0.0
Fauna	0.0
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	3.3
Metal	2.0
Glass	13.0
Textile	0.0
Other	0.0
Total	100.0

Figure 275. Artifacts are stored on the floor of an office.

Human Skeletal Remains

No DoD human skeletal remains are curated at DuVall and Associates.

Records Storage

Approximately 1.5 linear feet of records from Fort Campbell are located at Duvall and Associates (Table 368). The records, located in two boxes (as described above), consist of paper records, maps, reports, color prints and negatives. The paper records are located in manila folders, labeled directly in marker; photo envelopes house the photographic

Table 368.
Linear Footage of DoD Associated Documentation Housed at Duvall and Associates

Materials	Fort Campbell
Paper	0.50
Reports	0.53
Oversized*	0.01
Audiovisual	0.00
Photographic	0.44
Computer	0.00
Total	1.48

* Includes maps and other oversized documents.

material. Overall the records condition is good. A duplicate copy of the majority of the paper records have been made and sent to Fort Campbell.

Paper Records

The paper records comprise the majority of the collections (0.5 linear feet), and include excavation records, reports, and maps. Duplicate copies of this material have been made and sent to Fort Campbell.

Reports

Reports consist of approximately 0.53 linear feet and are in the same containers as the other paper records.

Photographs

Photographic records consist of both color prints and negatives. They total 0.44 linear feet and are stored in photo envelopes.

Maps

Maps consist of approximately 0.01 linear feet and are in the same containers as the other paper records.

Collections Management Standards

DuVall and Associates is not a permanent curation repository and does not have a comprehensive curation plan. However, when preparing materials for long-term curation they follow policies and guidelines established by the state that will ultimately curate the collections.

Comments

1. The final disposition of the collection has not been determined. According to Mr. Yates, the material will most likely be transferred to Fort Campbell.

2. Duplicate copies of the paper records have already been made and sent to Fort Campbell.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) creation of a finding aid, (c) placement of maps in archival flat files, and (d) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Identify a permanent repository for the transfer of the DoD archaeological collections.

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Panamerican Consultants, Inc.

Memphis, Tennessee

Repository Summary

Volume of Artifacts: 17.02 ft^3

Collection Origin: Fort Campbell, Kentucky

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 2.39 linear feet

Collection Origin: Fort Campbell, Kentucky

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: December 8, 1998

Point of Contact: Andrew Buchner, Archaeologist

Panamerican Consultants of Memphis, Tennessee, does not serve as a permanent repository for Department of Defense (DoD) collections. However, approximately 17.02 ft^3 of artifacts and 2.39 linear feet of documentation from Fort Campbell, Kentucky are currently located at Panamerican. The material will be transferred to Fort Campbell after the final report is complete.

Figure 276. Exterior of the house that contains the Panamerican Consultants's offices.

Repository

Panamerican Consultants occupies space in a two-story home that was built in 1916 (Figure 276). They share the building with an underwater/marine archaeological firm who uses parts of the house for offices and equipment storage. The foundation is concrete, and the exterior walls consist of wood shingles and brick. The house has an attic and a shingle roof. The outside front door has key and dead-bolt locks, and keys are limited to the company personnel. Additionally, all entrances and windows within the house are wired to an intrusion alarm system that is directly wired into the police department. Smoke detectors are located throughout the house. On a quarterly basis, the house is sprayed

for termites. No signs of pest infestation were apparent at the time of visit, although company personnel indicated that they have had a problem with a raccoon. The house has a central heating and air conditioning system. Collections are stored within various rooms of the house, including the basement. Due to space constraints, some collections may be moved to the attic, but currently, the DoD material is stored in rooms on the first and second floor of the house.

Collections Storage Areas

Artifacts are located on the first floor in two adjacent areas connected by an open doorway. The artifact storage area is approximately 264 ft^2. The basement is accessed through a stairway in this area, and tables and desks are located along the walls. The DoD artifact collections are stored in boxes on the floor, and in addition to the artifacts, the area is used to store some of the marine archaeology equipment (Figure 277). There is little remaining storage space in this area. Carpet covers the wood floor, and the ceiling and walls are plaster. There is one window in this area that is covered with blinds. Although the window is not locked, it is wired into the security system of the house. One fire extinguisher is located in this area.

Figure 277. Fort Campbell, Kentucky, artifacts are stored on the floor of a first floor office.

The records storage area on the second floor is a room that serves as an office (Figure 278). It has tables and desks, and is serving as a temporary storage area for the records only. Panamerican will destroy the original records if Fort Campbell does not request they be sent with the artifacts. The floor is carpeted and the walls are painted. The three

Figure 278. Example of open documentaion that is located on a table in a box on the floor.

unlocked windows in the office have drapes and are wired into the house security system. The office has a door, but it is not locked on a routine basis. The DoD material is currently stored in one drawer of a filing cabinet and in a box and folders that are stacked on the floor and a table top, respectively; the area has little room for additional storage.

Artifact Storage

The artifacts (Table 369) are stored in 14 acid-free boxes, each measuring 15.5 x 13 x 10.5 (inches, d x w x h). The boxes are folded and covered with a telescoping lid (one box is missing a lid). Two collections comprise the Fort Campbell material. The first consists of eight boxes that have been completely processed. Currently, a piece of paper is taped to each box with the site number and provenience information. However, prior to final transfer, each box will have a printed adhesive label with project and site number information. Additionally, a computer-generated inventory of box contents will be located within each box. The artifacts in these boxes are stored within plastic bags of various sizes; some of the bags are zip-locks and others are secured with a rubber band. Tertiary plastic bags are nested within the secondary bags, and the majority of boxes are overpacked. The plastic bags (both secondary and tertiary) are directly labeled in marker with site number, provenience, project, and bag number Each box is labeled directly in marker with the installation name. All artifacts, which are sorted by provenience and material class, have been cleaned, and they are directly labeled. The

Table 369.
Percentage by Volume of DoD Artifacts Housed at Panamerican Consultants

Material Class	Fort Campbell
Lithics	58.0
Historic Ceramics	20.2
Prehistoric Ceramics	0.0
Fauna	0.1
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	0.0
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	4.7
Metal	10.4
Glass	6.5
Textile	0.0
Other (plastic and coal)	0.1
Total	100.0

other six boxes contain artifacts that are currently being processed. The boxes are labeled directly in marker with the project and the provenience. The artifacts have been processed and stored within the boxes as described above. However, the objects have not yet been directly labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at Panamerican Consultants.

Records Storage

Approximately 2.4 linear feet of records from Fort Campbell are located at Panamerican Consultants (Table 370). If Fort Campbell does not request this material be transferred with the artifacts, the documents will be destroyed. Shovel test forms are located in an acid-free box (as described for the artifacts). The box, stored on the floor, is directly labeled in marker with the project and contents. The forms are located in manila folder labeled directly in pencil. Although slightly dirty from the field, the collection is in good condition. The majority of the remaining paper records are located in manila folders (pencil labeling) that are located on a table top. Two letter-size, metal file cabinet drawers contain the remainder of the document collection, consisting of photographic material and a small

Table 370.
Linear Footage of DoD Associated Documentation Housed at Panamerican Consultants

Materials	Fort Campbell
Paper	1.87
Reports	0.17
Oversized*	0.01
Audiovisual	0.00
Photographic	0.33
Computer	0.00
Total	2.39

* Includes maps and other oversized documents.

amount of paper records. There are no finding aids for the material.

Paper Records

The paper records (1.87 linear feet) comprise the majority of the collections, and include shovel test forms, excavation and survey records, a draft report, and a folded map. All records are in good condition and stored within manila folders directly labeled in pencil that are located in the box, on the table, or in the filing cabinet.

Reports

A draft report consisting of approximately 0.17 linear feet is included in the paper records.

Photographs

Photographic records consist of black/white prints, negatives, slides, and four contact sheets. They total 0.33 linear feet and are stored within a metal filing cabinet. The slides are located in three plastic slide boxes that are labeled in marker and pen, while the prints and negatives are located in photograph packages from the developer.

Maps

One folded map consists of approximately 0.01 linear feet and is stored with the paper records.

Collections Management Standards

Panamerican Consultants is not a permanent curation repository and does not have a comprehensive curation plan. However, when preparing materials for long-term curation they follow policies and guidelines established by the state that will ultimately curate the collections.

Comments

The records will be destroyed unless requested by Fort Campbell for transfer with the artifacts.

Recommendations

1. Artifacts require (a) cleaning of unprocessed artifacts, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of an acid-free label in each secondary container.

2. Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) placement of map in an archival flat file, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper records and original negatives in a separate, fire-safe, and secure location.

3. Identify a permanent repository for the transfer of DoD archaeological collections.

4. Per 36 CFR Part 79, DoD original associated documentation cannot be destroyed.

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Pinson Mounds Museum

Pinson, Tennessee

Repository Summary

Volume of Artifacts: 4.45 ft^3

Collection Origin: Fort Campbell, Kentucky; Holston Army Ammunition Plant, Tennessee

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.24 linear feet

Collection Origin: Holston Army Ammunition Plant, Tennessee

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: December 7, 1998

Point of Contact: Mark A. Norton, Curator

The Pinson Mounds Museum is located at the Pinson Mounds State Archaeological Area, Pinson, Tennessee. The museum curates cultural materials from sites located in the state archaeological areas and also serves as the central curation repository for the Division of Archaeology, Tennessee Department of Conservation. Archaeological collections curated here from Department of Defense (DoD) installations include material from Fort Campbell and Holston Army Ammunition Plant (Table 371). Building information for this chapter came from previous research by the St. Louis District (Slaymaker 1996).

Table 371.
Volume of DoD Archaeological Collections Housed at Pinson Mounds Museum

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Fort Campbell	1.18	—
Holston Army Ammunition Plant	3.27	0.24
Totals	3.27	0.24

Repository

The Central Curation repository, Division of Archaeology, occupies a one-story building with a ground floor display area that serves as a museum and a large below-grade curation repository (Figure 279). The repository was built specifically as the Pinson Mounds Museum and the central repository of the Division of Archaeology. The ground floor of the museum contains a display area, office and a gift counter. The below-grade portion consists of office, processing and analysis laboratories, library space, three collection storage areas, a drafting room, a mechanical room, a loading

Figure 279. Exterior of the museum.

Figure 280. Examples of the environmental and fire protection systems.

dock, and restrooms. The building has a concrete slab foundation, reinforced concrete block exterior walls that are mounded with earth, and a rubber and gravel roof covered with earth. The below-ground area totals 9,430 ft^2.

Collections Storage Area

The DoD collections are stored within one room in the below-ground area. This room is devoted completely to artifact storage and accessed through an interior steel door with a key and dead-bolt lock. There are intrusion alarms on the doors and motion detectors within the museum. The floor and walls of the repository are constructed of concrete, and there are no windows. The temperature and humidity in the building are controlled by a heating, ventilation and air conditioning (HVAC) system installed and maintained under the supervision of the Tennessee Valley Authority. Additional humidity monitoring is performed, and individual portable humidifiers are used within the collection storage areas to augment the main system. The repository has an integrated program for pest management, including monitoring and control on a monthly basis by a professional pest-management company. There are no signs of pest infestation. The repository is fireproof, and there are manual fire alarms, heat sensors, and smoke detectors (Figure 280).

Artifact Storage

The DoD artifacts (Table 372) are stored on nonmovable metal shelving units. Each self measures 18 x 48 x 11.5 (inches, d x w x h). All collections are accessioned upon receipt and entered into a database. The database, which is cross indexed, records the location of each box. The artifact collections are stored in acidic boxes, each slightly more than 1 ft^3. One box holds the Fort Campbell material. It is directly labeled in marker with site numbers, date, and accession numbers. The collection is secondary bagged in paper bags, which are also labeled with site number, date and accession number. All of the artifacts are cleaned and labeled (in a marking pen) and sorted by site number. Three boxes contain the collections from Holston Army Ammunition Plant, which are labeled similarly to the Fort Campbell material. Secondary containers for Holston Army Ammunition Plant consist of plastic

Table 372.
Percentage by Volume of DoD Artifacts Housed at Pinson Mounds Museum

Material Class	Fort Campbell	Holston Army Ammunition Plant
Lithics	24.4	57.3
Historic Ceramics	0.0	6.1
Prehistoric Ceramics	1.4	6.1
Fauna	0.4	0.0
Shell	0.5	0.0
Botanical	0.0	0.0
Flotation	0.0	0.0
Soil	0.0	0.0
^{14}C	0.0	0.2
Human Skeletal	0.0	0.0
Worked Shell	0.0	0.0
Worked Bone	0.0	0.0
Brick	0.0	0.0
Metal	0.0	1.7
Glass	0.0	1.7
Textile	0.0	0.0
Other (plastic)	0.0	0.2
Total	26.7	73.3

zip-lock bags labeled in marker and these contain tertiary containers. Approximately 90% of the Holston Army Ammunition Plant artifacts are cleaned, all are sorted by provenience, and 66% have tertiary paper-insert labels.

Human Skeletal Remains

No DoD human skeletal remains are curated at Pinson Mounds Museum.

Records Storage

Approximately 0.2 linear feet of records from Holston Army Ammunition Plant are located at the Central Curation repository (Table 373). The records are stored in the artifact boxes (described above). The collection consists of paper records, photographic material, and one computer disk. Binder, paper clips, and other contaminants were noted throughout. Overall the records condition is good. As with the artifacts, a database program manages the accession and locational information for the collections. No duplicate copy of the records are known.

Table 373.
Linear Inches of Associated Documentation at Pinson Mounds Museum

Materials	Holston Army Ammunition Plant
Paper	0.11
Reports	0.06
Oversized*	0.01
Audiovisual	0.00
Photographic	0.05
Computer	0.01
Total	0.24

* Includes maps and other oversized documents.

Paper Records

The paper records comprise the majority of the collections (0.11 linear feet), and include excavation and survey records, one report, and a folded map. They are located in directly labeled manila folders.

Reports

One report (0.06 linear feet) is located with the collections.

Photographs

Photographic records consist of color and black and white prints, negatives, and color slides. They total 0.05 linear feet, and are stored in archival, plastic photograph envelopes and sleeves.

Maps

A folded map (0.01 linear feet) is located with the collections in a manila folder

Computer

One computer disk is stored within the manila envelopes with the records. It is a standard 3.5-inch floppy disk (0.01 linear feet).

Collections Management Standards

Pinson Mounds Museum is a long-term curation repository that does have specific written curation policies for collections.

Comments

Artifacts and records require processing to comply with 36 CFR Part 79.

Recommendations

1. Artifacts require (a) cleaning), (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) removal of all contaminants, (c) packaging in appropriately labeled archival primary and secondary containers, (d) placement of map in an archival flat file, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

198

University of Tennessee-Chattanooga

Jeffrey L. Brown Institute of Archeology
Chattanooga, Tennessee

Repository Summary

Volume of Artifacts: None

Linear Feet of Records: 1.33 linear feet

Collection Origin: Hunter Army Airfield, Georgia; Kings Bay Naval Submarine Base, Georgia

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: December 10, 1998

Point of Contact: Dr. Nicholas Honerkamp, Curator

The Jeffrey L. Brown Institute of Archeology is located at the University of Tennessee in Chattanooga. Although the Institute does not serve as a permanent repository for Department of Defense (DoD) collections, 1.33 linear feet of records from Hunter Army Air Field and Naval Submarine Base, Kings Bay are currently stored there (Table 374). The artifacts from these two projects have been transferred to other locations; no other DoD collections are housed at the Institute.

Table 374.
Volume of DoD Archaeological Collections Housed at the University of Tennessee-Chattanooga

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Hunter Army Air Field	—	0.25
NSB Kings Bay	—	1.08
Totals	—	1.33

Repository

DoD records housed at the Jeffrey L. Brown Institute of Archeology are kept in Brock Hall (Figure 281). The foundation of Brock Hall is concrete and the exterior walls are brick. Constructed around the turn of the twentieth century, Brock Hall has always served as a university building, with classrooms and offices.

Figure 281. Exterior of Brock Hall where Department of Defense records are stored by the institute.

Collections Storage Area

The DoD records are kept in the area adjacent to Dr. Nicholas Honerkamp's office, Room 104. The interior walls of this space are sheetrock, the ceiling is suspended acoustical tiles, and the floor is carpet over tile. The office has one to two windows that are locked and covered by blinds, but there are no windows in the collections storage area itself. The room where the DoD records are kept measures about 200 ft^2. The only available storage space is one bookcase, which is full. The temperature is maintained in the storage area by central air-conditioning and forced-air heat. There is lock on the door to Room 104; only Dr. Honerkamp and one other individual have keys. Sprinklers have been installed in the collections storage area. No fire extinguishers are present in this room, but one is located in the adjacent room. The room is sprayed for pests every one to two months. There were no signs of infestation at the time of the visit.

Artifact Storage

No DoD artifacts are curated at the Jeffrey L. Brown Institute of Archeology.

Human Skeletal Remains

No DoD human skeletal remains are curated at the Jeffrey L. Brown Institute of Archeology.

Records Storage

The 1.6 linear feet of DoD records (Table 375) are kept on nonmovable wooden shelves measuring 96 x 14.5 x 38 (inches, d x w x h). Loose papers are kept in manila folders. Photographic records are kept in seven three-ring binders stored directly on the shelves (Figure 282). The binders have an adhesive label with the project name and type of documents written in pen. The reports are not stored in any primary or secondary container.

Table 375.
Linear Footage of DoD Associated Documentation at the University of Tennessee-Chattanooga

Materials	Hunter Army Air Field	NSB Kings Bay
Paper	0.17	0.29
Reports	0.00	0.08
Oversized*	0.08	0.00
Audiovisual	0.00	0.00
Photographic	0.00	0.71
Computer	0.00	0.00
Total	0.25	1.08

* Includes maps and other oversized documents.

Figure 282. The bookshelf where the Department of Defense documents are usually stored.

Paper Records

The paper records from Hunter Army Air Field encompass .046 linear feet of maps, field notes, and catalog sheets (Figure 283). Kings Bay Naval Submarine Base's paper records consist of 0.29 linear feet of field notes and 0.17 linear feet of artifact catalogues.

Reports

Reports totaling 0.08 linear feet are included in the Kings Bay Naval Submarine Base collection.

Figure 283. Documentation is stored in Room 104 in Brock Hall.

Maps

Approximately 0.08 linear feet of maps from Hunter Army Air Field are present. The maps are stored directly on the shelves.

Photographic Records

Photographic material from Kings Bay Naval Submarine Base includes negatives and slides totaling 0.71 linear feet.

Collections Management Standards

The Jeffrey L. Brown Institute of Archeology does not serve as a permanent curation facility for archaeological collections. They do not have a curation policy or a guide to collections management.

Comments

The records are not boxed or packaged in any type of primary container.

Recommendations

Records require (a) packaging in appropriately labeled archival primary and secondary containers, (b) placement of maps in an archival, flat file case, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

199

University of Tennessee-Knoxville

Transportation Center
Knoxville, Tennessee

Repository Summary

Volume of Artifacts: 14.58 ft^3

Collection Origin: Arnold Air Force Base, Tennessee

Compliance Status: Artifacts require complete rehabilitation to comply with exiting federal guidelines and standards for collections.

Linear Feet of Records: 2.67 linear feet

Collection Origin: Arnold Air Force Base, Tennessee

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: December 11, 1998

Point of Contact: Dr. Charles Bentz, Curator

The University of Tennessee-Knoxville Transportation Center, located in downtown Knoxville, sponsors an Archaeological Studies Group that conducts excavations and collects archaeological material. The administrative offices are located in the University of Tennessee, Knoxville Conference Center (Figure 284). The DoD artifacts and records (14.58 ft^3 of archaeological materials and 2.67 linear feet of records) are stored in the basement of the parking garage adjacent to the Conference Center.

Figure 284. Exterior of UT Conference Center building. A few offices are located here, but the collections are stored in an adjacent underground warehouse.

Repository

The Transportation Center's collections are stored in the basement of a former parking garage that was converted to warehouse storage. The repository is attached to the University Conference Center, where Dr. Bentz's office is located. The lower warehouse, as the repository is called, has a concrete foundation, a concrete roof, and concrete block exterior walls. The artifacts and the records are stored in two different rooms of this warehouse. Both rooms and

storage areas have central air-conditioning and forced-air heat to regulate the temperature. The humidity levels can be increased but can not be decreased. Access to the building is unrestricted during business hours, but is controlled with an identification card reader system after hours. The main door is locked with a dead-bolt. Sprinklers have been installed throughout the building for fire suppression. There is no pest management program for the lower warehouse, but infestation has not been a problem.

Collections Storage Areas

The artifacts are housed in the Artifacts Storage Room, which has a capacity of 1,000–1,200 ft^2, and has concrete and sheetrock walls and a concrete floor and ceiling. There are no windows. Manual fire alarms and smoke detectors are present, and a fire extinguisher is located just outside the door. Supplies and other materials are also stored in this room. Between 75 and 100% of the storage room is filled.

Records are stored in an area that is used for office space. temporary space dividers have been erected in this area to create several "rooms," which serve as the offices. The floor and ceiling of this area are concrete. There are no windows. Sprinklers are the only means of fire suppression.

Artifact Storage

Arnold Air Force base artifacts (Table 376) are stored in archival boxes stacked on metal shelves (Figure 285). The boxes are labeled directly in marker with the project name and the site number(s). Two oversized objects would not fit in the boxes; they are stored directly on the shelves (Figure 286). All artifacts are in zip-lock bags within the boxes. The bags are labeled directly in marker with the site number, provenience, and project. The site name is included in some cases. All artifacts have been washed and sorted by site number and provenience. None of the artifacts have been directly labeled. Both of the unboxed large objects have been washed but not directly labeled.

Human Skeletal Remains

No DoD human skeletal remains are curated at the University of Tennessee-Knoxville.

Table 376.
Percentage by Volume of DoD Artifacts Housed at University of Tennessee, Knoxville

Material Class	Arnold AFB
Lithics	22.1
Historic Ceramics	29.1
Prehistoric Ceramics	2.3
Fauna	0.1
Shell	0.0
Botanical	0.1
Flotation	0.1
Soil	2.8
^{14}C	0.1
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	15.3
Metal	16.6
Glass	11.4
Textile	0.0
Other	0.0
Total	100.0

Figure 285. Artifacts are stored in archival boxes stacked on metal shelving units.

Records Storage

The records (Table 377) are kept in a central space separating two rows of offices. Staff refer to this space as the "bookshelves area" (Figure 287). It is defined by plastic space dividers. Documents are stored on nonmovable metal shelves. Several types of archival primary containers are used: (1) two three-ring binders measuring 2.5 x 12 x 12 (inches,

Figure 286. Two artifacts from Arnold AFB, Tennessee, are stored loose on shelves above the boxed collections.

Figure 287. Examples of Arnold AFB, Tennessee, associated documentation.

d x w x h), (2) two folded document boxes with metal clasps and a telescoping lids measuring 5 x 12.25 x 10.25 (inches, d x w x h), and (3) one folded storage box with a telescoping lid measuring 15.6 x 13 x 10 (inches, d x w x h). Only the storage box is labeled; "Tullahoma Paperwork" is marked in pen directly on the box. Additionally, four nonarchival binders hold some photographic records.

Paper Records

Shovel test forms totaling 0.58 linear feet are stored in acid-free folders with no labels. These are stored in an archival, folded box measuring 15.6 x13 x10 (inches, d x w x h).

Reports

All of the reports at the Transportation Center are arranged by year. The Arnold Air Force Base reports, totaling 0.42 linear feet, are stored in two archival boxes. Each box measures 5 x 12.3 x 10.3 (inches, d x w x h). There are no secondary containers.

Table 377.
Linear Footage of DoD Associated Documentation Housed at the University of Tennessee, Knoxville

Materials	Arnold AFB
Paper	0.58
Reports	0.42
Oversized*	0.25
Audiovisual	0.00
Photographic	1.42
Computer	0.00
Total	2.67

* Includes maps and other oversized documents.

Maps

Approximately 0.25 linear feet of maps of Arnold Air Force Base are folded or rolled and stored directly on the top shelf. There are no labels or other way to identify the maps without unrolling or unfolding them.

Photographs

The photographic records are kept in six unlabeled three-ring binders. Two binders are archival quality, and four are non-archival plastic. Photographic records are organized by the year of excavation: material from older projects is kept in the archival binders. Within each of the six binders, materials are stored in archival plastic sleeves. These sleeves are labeled directly in pen. One archival binder contains 0.71 linear feet of black and white prints; the other archival binder contains 0.71 linear feet of slides. A combination of negatives, slides, and black and white photos are contained in the four plastic binders, totaling 1 linear foot. Each binder also contains paper photo log sheets.

Collections Management Standards

The Transportation Center does have contracts to curate archaeological collections long-term, but not with the Department of Defense. The Arnold Air Force Base collections will not be permanently housed here. On the day of St. Louis District's visit, Pam King from Arnold Air Force Base met with Dr. Bentz to discuss the final disposition of the collections.

Comments

1. The Transportation Center plans to add labels to archival records storage boxes in the future.

2. One archival box has small punctures in the lid. The plastic binders are dirty and show fingerprints.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) packaging of some photographic material in appropriately labeled archival primary containers, (b) placement of maps in an archival, flat file case, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

200

Parsons Engineering Science

Fairfax, Virginia

Repository Summary

Volume of Artifacts: 26.75 ft^3

Collection Origin: Dover Air Force Base, Delaware; Avon Park Air Force Range, Florida; Camp Smith, New York; Plattsburgh Air Force Base, New York; Pope Air Force Base, North Carolina; Charleston Air Force Base, South Carolina

Compliance Status: Artifacts require partial rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 2.06 linear feet

Collection Origin: Dover Air Force Base, Delaware; Plattsburgh Air Force Base, New York; Pope Air Force Base, North Carolina; Charleston Air Force Base, South Carolina

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: May 24, 1999

Point of Contact: Carter Shields, Laboratory Supervisor

Parsons Engineering Science is an archaeological contracting firm with multiple offices in more than 25 states. They have conducted numerous archaeological investigations for the Department of Defense (DoD). The offices, laboratory, and temporary artifact storage area for the headquarters of Parsons Cultural Resources Division is located at an office building in Fairfax, Virginia. In 1996, the St. Louis District visited the Fairfax office during a project conducted for the U.S. Engineering Field Activity, Chesapeake Division (Marino and Murdoch 1997), but collections information listed below (Table 378) is from the 1999 visit only.

Table 378.
Volume of DoD Archaeological Collections Housed at Parsons Engineering Science

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Avon Park AFR	3.12	—
Camp Smith	0.07	—
Charleston AFB	2.35	0.13
Dover AFB	—	1.54
Plattsburgh AFB	21.19	0.33
Pope AFB	0.02	0.06
Totals	26.75	2.06

Repository

Parsons Engineering Science operates out of a privately owned 60,000 ft^2 office building, constructed circa 1981. The company uses a total of 36,000 ft^2 within the building. The laboratory and storage area occupies 1,972 ft^2 on the ground level. Multiple activity areas are present including a 225 ft^2

wet lab, a 1,254 ft^2 dry lab, and a 493 ft^2 equipment and samples storage room. Office space and work areas are located throughout these areas. Additionally, the staff have access to the environmental lab and lunch room located on that floor. The repository has a concrete foundation, and exterior walls are composed of concrete block and steel framing with a brick exterior. The roof is covered with built-up asphalt. All offices are carpeted and ceilings are suspended acoustical tile. The entire building is professionally cleaned on a daily basis. All windows are shaded and lighting is provided by overhead, ultraviolet filtered fluorescent tube fixtures. Security measures for the repository consist of sealed exterior doors with an intrusion alarm system tied to the police station. Key locks are on interior doors throughout the building. Staff members self-monitor access to the collection area.

Collections Storage Areas

The floor is concrete and covered with industrial carpeting. Interior walls are painted wallboard and the ceiling is suspended acoustical tile. There is a set of glass and metal doors to the storage and processing area. Security is controlled by key lock, with limited personnel access. There is one large window in the area. It is covered by shades and does not open. The building has central air conditioning and heat equipped with dust filters. Heat and humidity are not monitored or regulated in the storage area because the environmental controls cannot be set for individual rooms. The entire building is professionally sprayed biannually for pests. Parsons Engineering staff monitors for infestation on an as-needed basis. There were no signs of pest infestation observed by the assessment team. Fire detection measure consist of smoke detectors, manual fire alarms, and a main alarm system wired into the fire department. Fire suppression systems consist of heat activated wet-sprinkler system and a manual fire extinguisher. Within the collections storage area metal shelving units are used to hold the artifact boxes. However, because the shelves are filled to capacity, many of the boxes are stacked on the floor. All DoD collections were stacked on the floor (Figure 288).

Figure 288. Department of Defense collections are stacked on the floor in the storage area.

Artifact Storage

Artifact processing and storage follow the standards of the curation repository that has been designated as the permanent repository. The DoD artifact collections (Table 379) are stored in acid-free cardboard boxes that measure 15.5 x 12.5 x 10.5 (inches, d x w x h). The boxes are folded and have telescoping lids. At the time of the visit, the boxes were labeled with yellow post-it notes. These list the project, provenience, and catalog or bag numbers contained. Prior to transfer to a permanent repository, these will be replaced with adhesive labels. Secondary containers are almost 100% 4-mil plastic zip- lock bags labeled directly in marker. The labeling generally records site number, site name, provenience, project, date, and catalog number. The secondary bags are nested with either plastic zip-lock bags or small boxes (primarily used for fauna). The tertiary containers are also directly labeled, and occasionally, this is in place of secondary container labeling. Additionally, acid-free paper inserts are placed in the majority of lowest level storage bag. All processed artifacts are clean, and about 50% of the artifacts are directly labeled. One plastic Rubbermaid box of material had just been received prior to the assessment team's visit and it had not been washed or processed. It will undergo the same processing and storage as described above.

Human Skeletal Remains

No DoD human skeletal remains are curated at Parsons Engineering Science.

Table 379.
Percentage by Volume of DoD Artifacts Housed at Parsons Engineering Science

Material Class	Avon Park AFR	Camp Smith	Charleston AFB	Plattsburgh AFB	Pope AFB
Lithics	2.6	0.0	1.3	0.1	0.0
Historic Ceramics	0.3	0.1	0.9	16.5	0.0
Prehistoric Ceramics	2.0	0.0	0.9	0.2	0.1
Fauna	1.5	0.0	0.0	10.2	0.0
Shell	2.6	0.0	0.0	0.7	0.0
Botanical	0.0	0.0	0.0	0.1	0.0
Flotation	0.0	0.0	0.0	0.0	0.0
Soil	00	0.0	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0	0.0
Brick	0.0	0.0	2.2	8.9	0.0
Metal	2.3	0.0	1.8	13.1	0.0
Glass	0.3	0.1	1.3	29.3	0.0
Textile	0.0	0.0	0.0	0.2	0.0
Other (leather and coal)	0.0	0.0	0.4	0.0	0.0
Total	11.6	0.2	8.8	79.3	0.1

Records Storage

Original DoD records consist of paper records, reports, maps, photographic, and computer materials (Table 380). Acid-free paper is used for the original records; original and duplicate copies are sent to the final repository with the artifact collections. These are stored in three places within the building. Two archival boxes containing artifact collections (described above) also contain paper and photographic records. Acid-free manila folders and archival photographic sleeves in these boxes hold the material. Additionally, two staff offices have records. These are located in an enameled metal file cabinet and on wooden shelves (Figure 289). Within the file cabinet, some material is loose and others were contained in three-ring binders. Photographic material is variously in archival sleeves or the original envelope from the developer. Nine, three-ring binders hold collections on the wooden shelving units. These include paper records, reports, and photographs. Labeling on binders varies. No finding aids are available for the paper records.

Table 380.
Linear Footage of DoD Associated Documentation Housed at Parsons Engineering Science

Materials	Charleston AFB	Dover AFB	Plattsburgh AFB	Pope AFB
Paper	0.06	1.46	0.25	0.04
Reports	0.04	0.04	0.00	0.00
Oversized*	0.00	0.00	0.00	0.00
Audiovisual	0.00	0.00	0.00	0.00
Photographic	0.02	0.04	0.08	0.02
Computer	0.00	0.00	0.00	0.00
Total	0.13	1.54	0.33	0.06

* Includes maps and other oversized documents.

Paper Records

Paper material comprises 86% of the record collections at Parsons Engineering Science. It

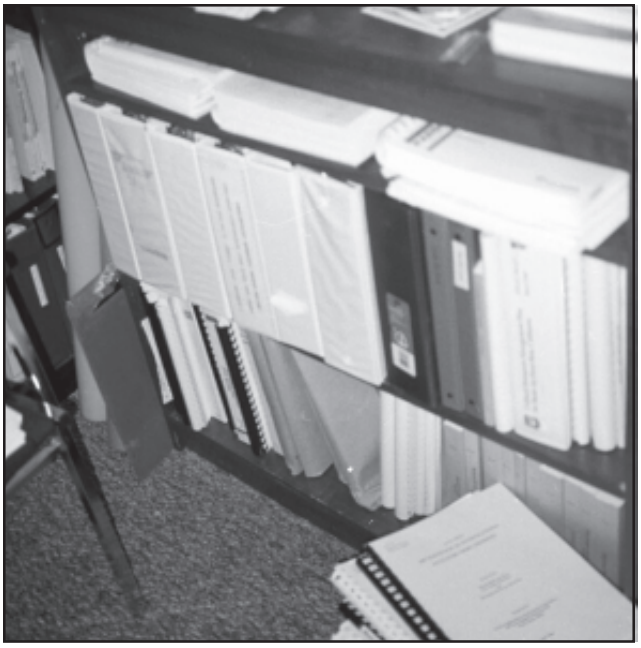

Figure 289. Record collections in an office.

consists of survey, excavation, and analysis records that are located in all three areas described above and is generally stored by type or record.

Reports

Report copies, as with the other paper records, are stored within all three areas described above. They consist of both draft and final copies.

Photographs

Photographic material consists of black and white prints, negatives, slide, and contact sheets. The majority of these have been stored within archival sleeves, although a few were in their original development envelopes.

Computer

One 3.5-inch disk and one CD comprise the extent of computer records at Parsons Engineering Science.

Collections Management Standards

Parsons Engineering Science is an archaeological contracting firm and holds collections only for analysis purposes. They are not a long-term curation repository and do not possess a comprehensive curation plan.

Comments

Collections require minimal processing to comply with federal regulation 36 CFR Part 79.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), and (b) placement in appropriately labeled archival secondary containers.

2. Records require (a) separation from the artifact collection container(s), (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, and (d) storage of archival paper copies and original negatives in a separate, fire-safe, and secure location.

3. Identify a permanent repository (ies) for the transfer of the DoD archaeological collections.

201

Tetra Tech

Fairfax, Virginia

Repository Summary

Volume of Artifacts: 35.77 ft^3

Collection Origin: Iowa Army Ammunition Plant, Iowa; Camp Kilmer, New Jersey; Pedricktown Support Facility, New Jersey; Fort Totten, New York

Compliance Status: Artifacts require complete rehabilitation to comply with federal guidelines and standards for collections.

Linear Feet of Records: 2.75 linear feet

Collection Origin: Camp Kilmer, New Jersey; Pedricktown Support Facility, New Jersey; Bellmore Logistics Facility, New York; Fort Totten, New York

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: May 20, 1999

Point of Contact: Paula Bienenfeld, Collections Manager

Tetra Tech is a private contracting firm that has conducted archaeological work on numerous DoD and Army National Guard facilities. The office, laboratory, and storage areas used by Tetra Tech occupy two separate buildings in an office park area, Buildings 10300 and 10306 Eaton Place. At the time of the St. Louis District's visit, collection were stored in both areas. However, per a telephone conversation with Paula Bienefeld in July 1999, all artifact collections and about half of the record collections are now located in the repository in Building 10306. Currently, Tetra Tech has collections from four installations (Table 381).

Table 381.
Volume of DoD Archaeological Collections Housed at Tetra Tech

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Iowa Army Ammunition Plant	14.64	—
Camp Kilmer	2.54	0.67
Pedricktown Support Facility	5.07	0.08
Pedricktown Support Facility/ Camp Kilmer/Bellemore Logistics Facility/Fort Totten	—	1.29
Fort Totten	13.52	0.71
Totals	35.77	2.75

Repository

Both Buildings 10300 and 10306 are office buildings that were constructed in 1986 of concrete and brick (Figure 290). The roofs have rubber membranes ballasted with stone. Each building has many floors that are occupied by various businesses. Tetra Tech has offices on the second floor of Building 10300,

Figure 290. Exterior of Building 10306. Building 10300 looks the same.

Suite 270, and the collections repository is located in the Bay 8 in the basement of Building 10306.

Collections Storage Areas

The collection storage area in Bay 8 of Building 10306 occupies approximately 420 ft^2. In addition to artifact storage, the room is used for various supply and office equipment storage. The floor is concrete, the walls are concrete and sheetrock, and the ceiling is metal. Access to the room is limited to specific Tetra Tech personnel. The single door to the area has a key lock and there are no windows or exterior access to the room. The collection storage area has a sprinkler system, and a fire alarm and fire extinguisher in the hall provide additional fire protection. Temperature is monitored and kept at a constant level via central air conditioning and heat. Humidity levels are not monitored or adjusted. Pest management is on an as-needed basis. All material is organized by facility and project, and located on two hand-constructed wood shelving units or on the floor (Figure 291). The shelving units measure 24 x 75 x 36 (inches, d x w x h), and have three shelves each.

The collections storage area in Building 10300, Suite 270, serves as office and work space. The collections within this area are records only. The suite has a suspended acoustical ceiling, walls of sheetrock, and a carpeted floor. Access to the suite is via a key lock available to Tetra Tech personnel only. There are no windows within the room. The environmental controls in this area are central air conditioning and heating kept at staff comfort levels. Fire detection and suppression consist of fire alarms and a sprinkler system. Pest are controlled on an as needed basis, but no problems have been detected. Collections in this are located within one four drawer file cabinet that measures 25 x 15 x 52 (inches, d x w x h).

Figure 291. Collections are located on the wooden shelves and on the floor of Bay 8.

Artifact Storage

Artifact storage varies according to the project, and occasionally within project. Approximately 60% of the artifacts are stored in archival boxes (either cardboard or chloroplast). The remainder of the material is located within acidic cardboard boxes or directly on the shelving units. The majority of boxes are labeled; some are directly written onto the boxes in marker and others are paper inserts into plastic 4-mil zip-lock bags. Information contained on the label varies, but generally includes the project or site number. Secondary containers primarily consist of 4-mil plastic zip-lock bags labeled directly in marker. Although label information varies, most have site, project, and provenience. Tertiary containers are labeled either directly or with nonarchival paper inserts, which provide additional provenience information. Artifacts (Table 382) are cleaned, sorted by provenience, and directly labeled with site and lot number. In addition to the boxed artifacts,

Table 382.
Percentage by Volume of DoD Artifacts Housed at Tetra Tech

Material Class	Iowa Army Ammunition Plant	Camp Kilmer	Pedricktown Support Facility	Fort Totten
Lithics	18.7	0.0	0.7	0.5
Historic Ceramics	10.7	2.5	2.5	8.7
Prehistoric Ceramics	0.0	0.0	0.0	0.0
Fauna	0.8	0.0	0.0	2.0
Shell	0.0	0.7	0.4	0.9
Botanical	0.0	0.0	0.4	0.0
Flotation	0.0	0.0	0.0	0.0
Soil	0.0	0.0	0.0	0.0
^{14}C	0.0	0.0	0.0	0.0
Human Skeletal	0.0	0.0	0.0	0.0
Worked Shell	0.0	0.0	0.0	0.0
Worked Bone	0.0	0.0	0.0	0.0
Brick	2.6	0.0	1.8	1.1
Metal	5.5	1.4	4.3	15.3
Glass	2.5	2.0	3.4	9.3
Textile	0.0	0.0	0.0	0.2
Other (buttons, marbles, coal, slate, battery, coal, plastic, tarpaper, and slag)	0.0	0.4	0.7	0.0
Total	40.8	7.0	14.2	38.0

approximately 8 ft^3 of soil samples are stored within large zip-lock bags directly on the shelves.

Human Skeletal Remains

No DoD human skeletal remains are curated at Tetra Tech.

Records Storage

Approximately half of the records collections (Table 383) are stored within boxes in Bay 8, some included with the artifacts. The different boxes vary as described above. The paper records are generally stored within manila folders that are directly labeled in marker or pencil. The boxed records are sorted by record type. The other half of the record collections are stored within a metal file cabinet within Suite 270 of Building 10300 (Figure 292). The cabinet measures 25 x 15 x 52 (inches, d x w x h), and there are 4 drawers in the unit. The cabinet is not routinely locked, although a key lock is available. Computer generated label inserts are placed on each drawer. Within the drawers the material is stored within manila folders, most directly labeled. The material is stored according to installation or facility. Little of the material has been duplicated and there are no finding aids or accession data.

Table 383.
Linear Footage of DoD Associated Documentation Housed at Tetra Tech

Materials	Camp Kilmer	Pedricktown Support Facility	Pedricktown Support Facility/Camp Kilmer/ Bellemore Logistics Facility/ Fort Totten	Fort Totten
Paper	0.50	0.00	1.13	0.58
Reports	0.00	0.08	0.08	0.13
Oversized*	0.00	0.00	0.08	0.00
Audiovisual	0.00	0.00	0.00	0.00
Photographic	0.17	0.00	0.00	0.00
Computer	0.00	0.00	0.00	0.00
Total	0.67	0.08	1.29	0.71

* Includes maps and other oversized documents.

Figure 292. File cabinet that contains associated documentation.

Paper records

The paper records comprise the majority of the collections. This includes administrative records, survey and excavation records, and small maps. As describe above, the collections are located within boxes or file cabinet drawers.

Reports

Report copies are located in both the boxes and file cabinet drawers.

Photographs

Photographic records consist of both color and black/white prints, negatives, slides, and contact sheets. The majority are stored within appropriate photographic sleeves.

Maps

Maps are stored with the other paper collections.

Collections Management Standards

Tetra Tech an archaeological contracting firm and as such holds collections only for analysis purposes. They are not a long-term curation repository and do not possess a comprehensive curation plan.

Comments

Artifacts and records require processing to comply with 36 CFR Part 79.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) bagging in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container.

2. Records require (a) separation from the artifact collection container, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, and (d) creation of an archival duplicate copy of paper records to be stored in a separate, fire-safe, and secure location.

3. Permanent curation repository(ies) should be identified for the transfer and long-term care of the DoD collections that have not been designated a final repository.

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Archaeological Consulting and Services, Inc.

Verona, Wisconsin

Repository Summary

Volume of Artifacts: 2.27 ft³

Collection Origin: Badger Army Ammunition Plant, Wisconsin; Volk Field Air National Guard Base, Wisconsin

Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.3 linear feet

Collection Origin: Volk Field Air National Guard Base, Wisconsin

Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: April 20 1999

Point of Contact: Phil Salkin, Principle Investigator

Archaeological Consulting and Services (ACS) is a professional cultural resources consulting firm who, in the past ten years have performed a number of cultural resources projects on Department of Defense (DoD) installations. In addition, they have received from avocational archaeologists' collections from the same DoD installations. At their office in Verona Wisconsin, ACS presently stores approximately 2.3 ft³ of DoD archaeological collections and 0.3 linear feet of associated documentation from projects on Badger Army Ammunition Plant (AAP) and Volk Field Air National Guard Base (ANG) (Table 384).

Table 384.
Volume of DoD Archaeological Collections Housed at Archaeological Consulting and Services

Installation	Archaeological Materials (ft^3)	Records (linear feet)
Badger Army Ammunition Plant	0.11	—
Volk Field Air National Guard Base	2.16	0.30
Totals	2.27	0.30

Repository

The cultural resources contract firm of Archaeological Consulting and Services is presently located in a historic residence in Verona, Wisconsin. This structure, built in 1900, is the town's original train master's home, and is listed on the National Register of Historic Places. It is a two-story wood-framed home with a stone foundation and asphalt shingled roof (Figure 293). Today this structure primarily functions as an office, laboratory, and temporary collection storage repository for the consulting firm.

Figure 293. Exterior of the building that contains the offices of Archaeological Consulting and Services.

Collections Storage Area

The DoD archaeological collections are stored in the third floor attic space of the house. This space is a large room and encompasses approximately 900 ft^2. It has wooden floors and slanted wood stud walls/ceiling. Two dormer windows are located in the collection storage area. Neither of these two windows is covered, however, collections are placed in the room on metal shelving units in such a way as not to allow direct sunlight to affect the collections. Activities in the collection storage area include temporary storage of artifacts and records and an artifact study area. All collections present in the area are archaeological in nature and currently occupy approximately 50% of the space allotted for collection storage.

Environmental controls are maintained in the collection storage room via forced-air heat in the wintertime and two large fans during the warmer months. For security measures key locks are used on exterior doors throughout the house as well as one located on the door to the attic storage room. There is no external sign for the consulting firm, which is an additional security measure. This is done intentionally to give the appearance that the building is a domestic residence and not a repository for archaeological collections. Fire protection within the building as well as the storage room is provided by fire extinguishers. There is also a pest management program in place, therefore, pest infestation has not been a problem.

Artifact Storage

Archaeological artifacts from three different DoD collections; two from Volk Field ANG and one from Badger AAP are stored on a nonmovable metal shelving unit in three nonarchival boxes measuring 15 x 10 x 15, 13.5 x 11 x 10, and 5 x 6 x 6.5 (inches, d x w x h). Each of these boxes has been directly labeled in either pen or marker. The label information on these boxes is not consistent except that the project names are given on all three boxes. Within the two Volk Field ANG boxes the collections are stored in 100% 2-mil plastic freezer zip-lock bags. The collections from Badger AAP were, at the time of the visit, in 100% paper bags. The staff at ACS gave assurances that these materials would be processed and placed in plastic bags. Artifacts from all three collections encompass approximately 2.3 ft^3 (Table 385). Fifty percent of the Volk Field ANG collections have been properly cleaned, and 67% of these collections have been directly labeled. None of the Badger AAP collection has been cleaned or directly labeled.

Table 385.
Percentage by Volume of DoD Artifacts Housed at Archaeological Consulting and Services

Material Class	Badger Army Ammunition Plant	Volk Field Air National Guard Base
Lithics	1.49	0.00
Prehistoric Ceramics	0.00	47.52
Fauna	0.00	0.00
Shell (unmodified)	0.00	0.00
Botanical	0.00	0.00
Flotation	0.00	0.00
Soil	0.00	0.00
^{14}C	0.00	0.00
Human Skeletal Remains	0.00	0.00
Worked Shell	0.00	0.00
Worked Bone	0.00	0.00
Brick/Masonry	0.00	0.00
Historic Ceramics	1.98	0.00
Metal	0.00	45.14
Glass	1.49	2.38
Textiles	0.00	0.00
Other	0.00	0.00
Total	4.96	95.04

Human Skeletal Remains

No DoD human skeletal remains are curated at Archaeological Consulting and Services.

Records Storage

Associated archaeological records are normally stored in 10 four-drawer letter- size filing cabinets in the collection storage room at ACS. However, the only DoD associated records, those from ASC's Volk Field ANG investigation, are stored in an acidic cardboard box (Table 386). No secondary containers are used within the box and these records are all loose.

Table 386.
Linear footage of DoD Associated Documentation Housed at Archaeological Consulting and Services

Materials	Volk Field Air National Guard Base
Paper	0.13
Reports	0.08
Oversized*	0.04
Audiovisual	0.00
Photographic	0.05
Computer	0.00
Total	0.30

* Includes maps and other oversized documents.

Paper Records

Paper records consist of approximately 0.13 linear feet of background materials. Contaminants such as paper clips were noted but overall their condition is good.

Reports

Report records comprise 0.08 linear feet of the collection.

Photographs

Photographs encompass 0.05 linear feet. Black-and-white prints comprise 0.04 linear feet and 0.01 linear feet are negatives.

Maps

Approximately 0.04 linear feet of cartographic material are present in the DoD collection at ASC. These materials consist of folded field project maps.

Collection Management Standards

Presently the Archaeological Consulting and Services is not considered a long-term curation repository and has no comprehensive plan for curation of archaeological collections. Their primary responsibility towards materials is to analyze and hold collections until permanent housing can be located.

Comments

1. Badger Army Ammunition Plant artifacts are to be processed.

2. ASC sent a collection from Volk Field ANG to the Volk Field ANG Base museum and may be on display.

Recommendations

1. Artifacts require (a) cleaning, (b) consistent direct labeling (when applicable), (c) placement in appropriately labeled archival primary and secondary containers, and (d) insertion of acid-free labels in each secondary container.

2. Records require (a) removal of all contaminates, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of maps in an archival flat file, (d) creation of a finding aid, (e) creation of an archival duplicate copy of paper records, and (f) storage of archival paper records and original negatives in a separate, fire-safe, and secure location.

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State Historical Society of Wisconsin

Madison, Wisconsin

Repository Summary

Volume of Artifacts: 19.17 ft^3
Collection Origin: Fort McCoy, Wisconsin
Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 0.52 linear feet
Collection Origin: Fort McCoy, Wisconsin
Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: April 19, 1999

Point of Contact: David Wooley, Curator of Anthropology

The State Historical Society of Wisconsin is both a state agency and a private membership organization. By statute, it is charged with collecting, advancing, and disseminating knowledge of Wisconsin and the trans-Allegheny West. As a state agency, the Historical Society's main curation priority are those archaeological collections generated from work on state-owned lands. However, approximately 19.17 ft^3 of archaeological material and 0.52 linear feet of associated records from cultural resource management projects on Fort McCoy, are curated at the State Historical Society of Wisconsin.

Repository

The State Historical Society of Wisconsin occupies a four story stone building on the campus of the University of Wisconsin, Madison. This building was originally constructed in 1910, and contains the collection facility, library, archives and offices of the State Historical Society of Wisconsin.

Collections Storage Area

The Fort McCoy archaeological collections are being stored in a basement collection storage room at the Historical Society. This large room extends beyond the four-story above grade structure and is beneath a concrete walkway/sidewalk on the University of Wisconsin Campus. Due to poor surface drainage, water running off this walkway tends to seep into the collections storage room, and, during periods of extremely high rain fall, flooding has occurred in the collection storage area. The architectural makeup of the collection storage room consists of concrete floors, walls, and ceiling. Since the room is located below grade, there are no windows. Security within the collection storage area is maintained by intrusion alarms, card key locks, and controlled access. Additionally, after public hours, security guards patrol the building.

Presently, this storage area is 100% capacity, and some collections are stored on the floor. Activities within the collection storage area include permanent and temporary storage of artifacts, along with a small artifact study area. Environmental controls are maintained throughout the building, including the collection storage room, with centralized heat and air-conditioning. Fire protection within the storage area is provided by smoke detectors, manual fire alarms, fire extinguishers, and heat sensors. Although the staff describes their pest management program as spraying on an as-needed basis, evidence of insect and rodent infestation has been found in the collection storage room.

Artifact Storage

Artifacts from the two Fort McCoy archaeological projects stored at the Wisconsin Historical Society encompass approximately 19.17 ft^3 (Table 387). Archaeological artifacts are stored on both nonmovable metal shelving units and in a series of wooden cabinets (Figure 294). Fourteen acidic cardboard boxes varying in size from 11 x 7.5 x 2.5 (inches, d x w x h) to 24 x 12 x 12.5 (inches, d x w x h) are stored on the shelves. Additionally, three wooden drawers in the cabinet that measure 30 x 18 x 4 (inches, d x w x h) contain diagnostic artifacts (Figure 295). The acidic boxes are directly labeled in marker with the project name, site number, and

Table 387.
Percentage by Volume of DoD Artifacts Housed at the State Historical Society of Wisconsin

Material Class	Fort McCoy
Lithics	72.1
Historic Ceramics	0.0
Prehistoric Ceramics	20.6
Fauna	3.6
Shell	0.0
Botanical	0.0
Flotation	0.0
Soil	0.0
^{14}C	3.6
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	0.0
Metal	0.1
Glass	0.0
Textile	0.0
Other	0.0
Total	100.0

Figure 294. Storage units that contain Fort McCoy, Wisconsin, archaeological collections in the basement collection storage room.

Figure 295. Cabinet storage unit containing diagnostic artifacts from Fort McCoy, Wisconsin, that are located in the basement collection storage room.

accession numbers; where as the drawers are labeled with project name and site numbers. Within the primary containers 80% of the collections are stored in paper bags, and 20% are stored in small nonarchival boxes with telescoping lids. All secondary containers appear to be directly labeled, however, no acid-free paper inserts have been provided. The collections tend to be sorted by site number and material class. Collections have been cleaned. Only diagnostic prehistoric materials that are stored in the wooden drawers have been directly labeled. The direct labeling consists of site number over catalog number.

Human Skeletal Remains

No DoD human skeletal remains are curated at the State Historical Society of Wisconsin.

Records Storage

Associated archaeological records are kept in the office of the Curator of Anthropology. The associated records from the Fort McCoy archaeological collections total 0.52 linear feet (Table 388), and are stored in a single drawer of a metal legal size filing cabinet measuring 51 x 25 x 17.5 (inches, h x d x w). Within this drawer, the records are kept in six legal-size accordion folders which have been directly labeled in marker with the project, site number, and the state trinomial site number.

Table 388.
Linear footage of DoD Associated Documentation Housed at the State Historical Society of Wisconsin

Materials	Fort McCoy
Paper	0.32
Reports	0.02
Oversized*	0.18
Audiovisual	0.00
Photographic	0.00
Computer	0.00
Total	0.52

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 0.32 linear feet. These records consist of administrative and excavation records. Some contaminants, such as paper clips and staples are found throughout the collection, however, overall, the paper records are in good condition.

Reports

Included in the document collections for Fort McCoy is a copy of the 1974 William Hurley cultural resources report, “Silver Creek Woodland Sites, Southwestern Wisconsin.”

Maps

Profile and site plan maps created in the field on 8.5 x 11 graph paper represent approximately 0.18 linear feet.

Collection Management Standards

Written policies at the State Historical Society of Wisconsin exist for loan agreements, donations, acceptance, laboratory processing, and cataloging of artifact materials. Due to extreme limitations in space, the Historical Society’s policy is to only except collections from state-owned land.

Comments

1. Primary containers for artifacts should be replaced.

2. Contaminants (e.g., staples, paper clips) were found in the records.

3. According to curatorial staff at the historical society, the collections assessed from the “Silver Creek Project” are not the property of the Department of Defense, but rather are the responsibility of the State of Wisconsin. These materials were recovered under the auspices of a Department of Transportation highway project that ran through Fort McCoy. According to the staff, the sites from which these materials were collected are located within the right-of-way of the highway and thus are the State’s responsibility. Ownership of these materials needs to be established by the real estate office at Fort McCoy.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) placement in appropriately labeled archival primary and secondary containers, (c) insertion of acid-free labels in each secondary container, and (d) relocation away from the threat of water damage.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) creation of a finding aid, (d) creation of an archival duplicate copy of paper records, and (e) storage of the copies in a separate, fire-safe, and secure location.

3. Establish ownership of the materials with the assistance of the real estate office and pertinent cultural resource personnel at Fort McCoy.

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University of Wisconsin, LaCrosse

Mississippi Valley Archaeological Center
LaCrosse, Wisconsin

Repository Summary

Volume of Artifacts: 2.16 ft^3
Collection Origin: Fort McCoy, Wisconsin
Compliance Status: Artifacts require complete rehabilitation to comply with existing federal guidelines and standards for collections.

Linear Feet of Records: 4.39 linear feet
Collection Origin: Fort McCoy, Wisconsin
Compliance Status: Documentation requires complete rehabilitation to comply with existing federal guidelines and standards for modern archival preservation.

Human Skeletal Remains: None

Assessment

Date of Visit: April 22, 1999

Point of Contact: Dr. Constance Arzigian, Laboratory Director

The Mississippi Valley Archaeological Center (MVAC) founded in 1982 is a regional archaeological center. It's mission is to provide education about ancient cultures of the upper Mississippi River Valley to the general public and undergraduate students, conduct research and exploration of archaeological sites and artifacts, preserve archaeological artifacts of ancient cultures which flourished within the upper Mississippi Valley, and provide a regional center to promote understanding of the prior inhabitants of this region. MVAC, located on the campus of the University of Wisconsin, LaCrosse, has been curating federal archaeological collections since its inception and currently house approximately 2.16 ft^3 of archaeological material and 4.39 linear feet of associated records from cultural resource management projects on Fort McCoy. These collections are the result of two cultural resources management projects performed by MVAC on Fort McCoy.

Repository

The Mississippi Valley Archaeological Center occupies a converted one-story brick power plant that has a full basement on the campus of the University of Wisconsin, LaCrosse (Figure 296). The power plant, originally built in 1939, is currently being remodeled by the university, and when finished will have upgraded facilities and systems including new heating and air conditioning, ventilation, electrical systems, and plumbing. The first floor of the Center will contain the offices for MVAC and the basement will be used for archaeological collections storage and laboratory space.

Collections Storage Area

The Fort McCoy archaeological collections are being stored in a basement collection storage room/

Figure 296. Exterior view of Center's offices that are located in a converted power plant.

laboratory at MVAC. This basement storage is a large 4,000 ft^2 room located completely below grade. The architectural makeup of the collection storage room consists of concrete floors, walls, and ceiling (Figure 297). No windows are located within the room. Security within the collection storage area is maintained by controlled access, dead-bolt and key locks, and campus police patrol. Presently, the storage area is at 100% capacity of available storage space, however, when the building renovations are complete, the curation staff anticipate the addition of space-saver shelving units will greatly increase MVAC's curation capacities. Activities within the present collection storage area include permanent and temporary storage of artifacts, artifact processing, collections analysis, records storage, records study, and photographic storage. Environmental controls are maintained throughout the building with window air conditioning units and radiant heat. Fire protection within the storage area is provided by smoke detectors, manual fire alarms, fire extinguishers, and heat sensors. Pest management for the collection storage area consists of monitoring and spraying on an as-needed bases. No evidence of insect or rodent infestation has been found in the collection storage room.

Figure 297. Collection storage units in the basement laboratory.

Artifact Storage

Archaeological artifacts from Fort McCoy are stored on both a nonmovable wooden shelving unit and on a laboratory table (Figure 298). Four acidic cardboard boxes varying in size from 16 x 11 x 9 to 11 x 2.5 x 5.25 (inches, d x w x h) hold the collections. Three of the four boxes have tears and compression damage. The boxes are not consistently labeled; labeling varies from no label to direct labeling of project name, year, site number, and material classes. Within the primary containers the collections are stored in plastic bags, 60% of which are secured with twist-ties and 40% are zip-lock bags. None of the secondary containers are directly labeled, however, acid-free paper labels have been placed within the bags with the following information: site number, catalog number, provenience, and material class description.

Figure 298. Primary and secondary containers used for Fort McCoy, Wisconsin, archaeological collections in basement laboratory.

MVAC curates two collections from Fort McCoy archaeological projects that encompass approximately 2.07 ft^3 and 0.09 ft^3 (Table 389). The larger of the two collections is from a recent project performed by MVAC and has not been fully processed. These artifacts have not been cleaned or directly labeled. All of the smaller collection has been cleaned and directly labeled when appropriate. The direct labeling consists of site number over catalog number.

Table 389.
Percentage by Volume of DoD Artifacts housed at the Mississippi Valley Archaeological Center

Material Class	Fort McCoy
Lithics	71.2
Historic Ceramics	0.0
Prehistoric Ceramics	7.7
Fauna	0.3
Shell	0.0
Botanical	9.2
Flotation	0.0
Soil	6.2
^{14}C	0.3
Human Skeletal	0.0
Worked Shell	0.0
Worked Bone	0.0
Brick	0.0
Metal	1.3
Glass	1.3
Textile	0.0
Other (iron concretion, fossil, and plastic)	2.5
Total	100.0

Human Skeletal Remains

No DoD human skeletal remains are curated at MVAC.

Records Storage

Approximately twenty filing cabinets in the basement laboratory of MVAC are devoted to the storage of associated archaeological records and accession files (Figure 299, Table 390). Additionally, copies of the master accession records for MVAC's collections are stored off-site. The records associated with the Fort McCoy archaeological collections (4.39 linear feet) are stored in both four acidic boxes next to the artifact collections on the laboratory table and in a filing cabinet. The four acidic boxes (measuring 15.5 x 12 x 10, inches, d x w x h) hold the records associated with MVAC's ongoing project on Fort McCoy. Within these boxes, the records are either loose, in binders, or kept in accordion folders which have been directly labeled in marker, pen, or pencil. The remaining Fort McCoy records are located in a 15 x 10 x 36 (inches, d x w x h) filing cabinet drawer labeled "Monroe County." Within this drawer the records are stored in manila file folders directly labeled 47MO284 and 47MO7.

Figure 299. Associated documentation storage in the basement laboratory.

Table 390.
Linear footage of DoD Associated Documentation at the Mississippi Valley Archaeological Center

Materials	Fort McCoy
Paper	2.70
Reports	0.88
Oversized*	0.23
Audiovisual	0.00
Photographic	0.21
Computer	0.38
Total	4.39

* Includes maps and other oversized documents.

Paper Records

Paper records comprise approximately 2.7 linear feet. These records consist of administrative, survey, excavation, and analysis records. Although these records are in good condition, they have not been archivally processed, and no finding aids were available. Except for the master accession records, security copies had not been made.

Reports

Approximately 0.88 linear feet of reports are stored with the Fort McCoy associated records. These reports include draft report copies from the recent MVAC project, as well as previous investigations on Fort McCoy.

Maps

Approximately 0.23 linear feet of cartographic material are present in the DoD collection at MVAC. These materials consist of rolled field project maps fastened together with a rubber band and lying loose on the laboratory table, as well as original maps and figures found in the file drawer. Together these records make up 5% of the total Fort McCoy associated documentation at MVAC.

Photographic

Photographic material encompasses approximately 0.21 linear feet of records and is stored with the rest of the collections.

Computer

Approximately 30 3.5 inch computer disks (0.38 linear feet) containing data regarding MVAC's recent archaeological project on Fort McCoy are stacked and laying loosely on the laboratory table.

Collection Management Standards

The Mississippi Valley Archaeological Center and Laboratory has a comprehensive plan for curation of archaeological collections. However the staff were unable to provide a copy of this plan.

Comments

At the time of the visit, the Mississippi Valley Archaeological Center and Laboratory were undergoing complete renovations. Therefore, the data contained in this report will not accurately depict the collection's storage environment once the renovation is complete. Additionally, MVAC is negotiating with the cultural resources staff at Fort McCoy to become the curation facility for all archaeological materials recovered from the installation.

Recommendations

1. Artifacts require (a) consistent direct labeling (when applicable), (b) bagging in appropriately labeled archival primary and secondary containers, and (c) insertion of acid-free labels in each secondary container for the unprocessed collections.

2. Records require (a) removal of all contaminants, (b) packaging in appropriately labeled archival primary and secondary containers, (c) placement of maps in a flat metal map-case, (d) creation of a finding aid, and (e) creation of an archival duplicate copy of all paper records to be stored in a separate, fire-safe, and secure location.

3. Upgrade fire detection and suppression system to include a sprinkler/suppression system.

4. Security measures should include an intrusion alarm system.

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Findings Summary

One-hundred thirty two repositories in 27 states (Table 391) are known to curate 6,620 ft^3 of archaeological materials and 653 linear feet of associated documentation recovered from 123 military installations. Assessment teams performed complete examinations of all known military collections at each location (Table 392).

Table 391.
Repositories Housing Archaeological Collections from Department of Defense Installations

Facility	City	State	Number of Collections Areas
Auburn University	Auburn	AL	1
ECG, Inc.	Anniston	AL	1
Fort McClellan	Fort McClellan	AL	1
Fort Rucker	Fort Rucker	AL	1
Jacksonville State University	Anniston	AL	1
Panamerican Consultants, Inc.	Tuscaloosa	AL	1
Redstone Arsenal	Huntsville	AL	2
Troy State University	Troy	AL	1
University of Alabama	Moundville	AL	3
Arkansas State University	Jonsboro	AR	1
University of Arkansas	Fayetteville	AR	1
Fort Chaffee	Fort Chaffee	AR	1
University of Arkansas Museum	Fayetteville	AR	1
University of Connecticut	Storrs	CT	1
Edward Heite Consulting	Camden	DE	1
Mid-Atlantic Archaeological Research (MAAR)	Newark	DE	1
Avon Park Air Force Range	Avon Park	FL	1
Cape Canaveral Air Station	Patrick Air Force Base	FL	1
Eglin Air Force Base	Eglin Air Force Base	FL	2
Environmental Services, Inc.	Jacksonville	FL	1
Florida Archaeological Services	Jacksonville	FL	1
Florida Bureau of Archaeological Research	Tallahassee	FL	1
Florida Museum of Natural History	Gainesville	FL	2
Florida State University	Tallahassee	FL	1
Hurlburt Field	Hurlburt Field	FL	1
Indian Temple Mound Museum	Fort Walton Beach	FL	1
Key West Art and Historical Society	Key West	FL	1
Naval Air Station Pensacola	Pensacola	FL	4
Pensacola Archaeological Laboratory	Pensacola	FL	1
Pensacola Historical Society Museum	Pensacola	FL	1
Prentice Thomas & Associates	Fort Walton Beach	FL	2

Table 391.
Repositories Housing Archaeological Collections from Department of Defense Installations (Continued)

Facility	City	State	Number of Collections Areas
Southeast Archaeological Center	Tallahassee	FL	1
T.T. Wentworth Jr. Florida State Museum	Pensacola	FL	1
The University of West Florida	Pensacola	FL	3
Tyndall Air Force Base	Tyndall Air Force Base	FL	2
Carolyn Rock	Woodbine	GA	1
Fort Stewart	Fort Stewart	GA	1
Robins Air Force Base	Robins Air Force Base	GA	1
Southeastern Archaeological Services	Atlanta	GA	1
TRC Garrow & Associates	Atlanta	GA	1
University of Georgia	Athens	GA	2
University of Iowa	Iowa City	IA	1
Illinois State Museum	Springfield	IL	1
Rock Island Arsenal Museum	Rock Island	IL	1
U.S. Army Construction Engineering Research Laboratory (USACERL)	Champaign	IL	1
University of Illinois	Urbana	IL	1
Ball State University	Muncie	IN	1
Glenn A. Black Laboratory of Archaeology	Bloomington	IN	1
Indiana State Museum	Indianapolis	IN	1
Indiana State University	Terre Haute	IN	2
University of Kansas	Lawrence	KS	1
University of Louisville	Louisville	KY	1
Cultural Resources Analysts, Inc.	Lexington	KY	1
Fort Campbell	Fort Campbell	KY	1
Fort Knox	Fort Knox	KY	1
U.S. Army Corps of Engineers, Louisville District	Louisville	KY	1
University of Kentucky	Lexington	KY	1
Timelines, Inc.	Littleton	MA	1
University of Massachusetts	Boston	MA	1
Smithsonian Institution Museum Support Center	Suitland	MD	3
University of Maine	Farmington	ME	2
Bureau of Michigan History, Office of State Archaeology	Lansing	MI	1
Commonwealth Cultural Resource Group	Jackson	MI	1
Great Lakes Research Associates	Williamston	MI	1
Jefferson Barracks	St. Louis	MO	1
Southwest Missouri State University	Springfield	MO	1
University of Missouri-Columbia	Columbia	MO	1
University of Missouri-St. Louis	St. Louis	MO	1
Washington University	St. Louis	MO	1
Camp Lejeune Marine Corps Base	Jacksonville	NC	1
Fort Bragg	Fayetteville	NC	1
New South Associates	Mebane	NC	1
North Carolina Office of State Archaeology	Raleigh	NC	2
University of North Carolina-Chapel Hill	Chapel Hill	NC	1
TRC Garrow & Associates	Chapel Hill	NC	1
New Boston Air Force Station	New Boston	NH	1
New Hampshire Division of Historic Resources	Concord	NH	1
Portsmouth Naval Shipyard Museum	Portsmouth	NH	1
Hunter Research	Trenton	NJ	1
Louis Berger & Associates	East Orange	NJ	1
Ecology & Environment, Inc.	Lancaster	NY	1
Fort Drum	Fort Drum	NY	2
Fort Hamilton Harbor Defense Museum	Brooklyn	NY	1
Panamerican Consultants, Inc. New York	Depew	NY	1
Seneca Army Depot	Romulus	NY	1
Staten Island Institute of Arts & Science	Staten Island	NY	1
TAMS Consultants, Inc.	New York	NY	1

Table 391.
Repositories Housing Archaeological Collections from Department of Defense Installations (Continued)

Facility	City	State	Number of Collections Areas
U.S. Military Academy, West Point	West Point	NY	1
Watervliet Arsenal	Watervliet	NY	1
Cleveland State University	Cleveland	OH	1
Archaeological & Historical Consultants	Centre Hall	PA	1
Carlisle Barracks	Carlisle Barracks	PA	1
Fort Indiantown Gap	Annville	PA	1
John Milner & Associates	West Chester	PA	1
The State Museum of Pennsylvania	Harrisburg	PA	1
Public Archaeological Laboratory, Inc.	Pawtucket	RI	1
Fort Jackson	Fort Jackson	SC	2
Parris Island Museum	Parris Island	SC	1
South Carolina Institute of Archaeology and Anthropology (SCIAA)	Columbia	SC	2
DuVall & Associates	Franklin	TN	1
University of Tennessee	Chattanooga	TN	1
Panamerican Consultants, Inc.	Memphis	TN	1
Pinson Mounds Archaeological Park	Pinson	TN	1
University of Tennessee Transportation Department	Knoxville	TN	1
Parsons Engineering Science, Inc.	Fairfax	VA	1
Tetra Tech	Fairfax	VA	2
Archaeological Consulting and Services, Inc.	Verona	WI	1
Fort McCoy	Sparta	WI	1
University of Wisconsin - LaCrosse	LaCrosse	WI	1
State Historical Society of Wisconsin	Madison	WI	1
Total			132

Table 392.
Quantity of Archaeological Collections Examined

Repository/Installations	Cubic Feet	Linear Feet
Auburn University, AL		
Fort McClellan, AL	0.15	0.07
MacDill Air Force Base, FL	0.00	0.01
Maxwell Air Force Base, AL	1.77	0.06
ECG, Inc., AL		
Clarks Hill Local Training Area, SC	0.00	0.44
Fort McClellan, AL		
Fort McClellan, AL	3.94	0.44
Fort Rucker, AL		
Fort Rucker, AL	1.49	2.21
Jacksonville State University, AL		
Fort McClellan, AL	5.29	0.38
Panamerican Consultants, Inc., AL		
Beaufort Marine Air Station, SC	0.25	0.94
Fort Bragg, NC	0.17	0.23
U.S. Marine Corps Recruiting Depot - Parris Island, SC	3.31	0.47
Redstone Arsenal, AL		
Redstone Arsenal, AL	5.94	0.00
Troy State University, AL		
Fort Rucker, AL	2.00	0.00

Table 392.
Quantity of Archaeological Collections Examined (Continued)

Repository/Installations	Cubic Feet	Linear Feet
University of Alabama, AL		
Beaufort Marine Air Station, SC	31.00	0.42
Fort Rucker, AL	8.54	0.78
Hurlburt Field, FL	0.91	0.08
Maxwell Air Force Base, AL	0.91	0.03
Milan Army Ammunition Plant, TN	0.91	0.02
Naval Air Station Key West, FL	0.91	0.05
Naval Air Station Mayport, FL	0.91	0.05
Redstone Arsenal, AL	141.06	2.04
Arkansas State University, AR		
Eaker Air Force Base, AR	13.31	1.50
University of Arkansas, AR		
Fort Chaffee, AR	7.11	0.29
Little Rock Air Force Base, AR	5.44	1.21
Fort Chaffee, AR		
Fort Chaffee, AR	0.00	5.13
University of Arkansas Museum, AR		
Fort Chaffee, AR	54.45	3.19
University of Connecticut, CT		
Camp Rowland, CT	1.15	0.04
Stones Ranch, CT	1.15	0.02
Edward Heite Consulting, DE		
Naval Weapons Station, Earle, NJ	1.87	0.46
Mid-Atlantic Archaeological Research (MAAR), DE		
Dover Air Force Base, DE	6.00	0.08
Avon Park Air Force Range, FL		
Avon Park Air Force Range, FL	35.63	3.79
Moody Air Force Base, GA	1.13	0.83
Cape Canaveral Air Station, FL		
Cape Canaveral, FL	0.00	0.71
Eglin Air Force Base, FL		
Eglin Air Force Base, FL	289.92	71.35
Environmental Services, Inc., FL		
Camp Lejeune Marine Corps Base, NC	0.00	0.08
Naval Air Station Pensacola, FL	1.46	0.80
Florida Archaeological Services, FL		
Naval Air Station Jacksonville, FL	12.45	4.93
Florida Bureau of Archaeological Research, FL		
Cape Canaveral, FL	16.79	5.75
Cape St. George, FL	5.21	0.00
Eglin Air Force Base, FL	5.21	0.00
Naval Air Station Pensacola, FL	2.08	0.00
Tyndall Air Force Base, FL	61.81	2.08
Florida Museum of Natural History, FL		
Cape Canaveral, FL	5.16	0.08
Kings Bay Naval Submarine Base, GA	372.78	34.00
Florida State University, FL		
Cape St. George, FL	33.79	0.00
Eglin Air Force Base, FL	5.63	0.00
Naval Air Station Pensacola, FL	1.13	0.00
Naval Coastal Systems Center, FL	78.99	0.52
Tyndall Air Force Base, FL	4.51	0.13

Table 392.
Quantity of Archaeological Collections Examined (Continued)

Repository/Installations	Cubic Feet	Linear Feet
Hurlburt Field, FL		
Hurlburt Field, FL	0.00	1.46
Indian Temple Mound Museum, FL		
Eglin Air Force Base, FL	3.17	0.77
Key West Art and Historical Society, FL		
Naval Air Station Key West, FL	1.00	0.00
Naval Air Station Pensacola, FL		
Naval Air Station Pensacola, FL	1477.22	4.38
Pensacola Archaeological Laboratory, FL		
Naval Air Station Pensacola, FL	0.00	5.08
Pensacola Historical Society Museum, FL		
Naval Air Station Pensacola, FL	1.00	0.00
Prentice Thomas & Associates, FL		
Eglin Air Force Base, FL	30.63	36.71
Fort Stewart, GA	0.00	0.21
Southeast Archaeological Center, FL		
Estate Bethlehem, St. Croix, VI	0.30	0.38
T.T. Wentworth, Jr. Florida State Museum, FL		
Naval Air Station Pensacola, FL	0.20	0.02
The University of West Florida, FL		
Naval Air Station Pensacola, FL	703.88	14.47
Tyndall Air Force Base, FL	0.00	0.04
Tyndall Air Force Base, FL		
Tyndall Air Force Base, FL	1.51	0.77
Carolyn Rock, GA		
Kings Bay Naval Submarine Base, GA	23.02	2.92
Fort Stewart, GA		
Fort Stewart, GA	53.05	45.50
Hunter Army Airfield, GA	10.15	0.00
New South Associates Stone Mountain Office, GA*		
Beaufort Marine Air Station, SC	8.79	0.40
Coosa River Storage Annex, AL	1.10	0.38
Fort Fisher, NC	0.14	0.00
Fort Gordon, GA	2.75	0.00
Shaw Air Force Base, SC	13.70	0.79
Robins Air Force Base, Museum of Aviation, GA		
Robins Air Force Base, GA	19.23	4.42
Southeastern Archaeological Services, GA		
Fort Bragg, NC	29.59	2.35
Fort Gordon, GA	1.17	0.00
TRC Garrow & Associates, GA		
Beaufort Naval Hospital, SC	1.08	0.15
Fort McPherson, GA	1.08	0.19
Fort Stewart, GA	43.04	0.21
Grubbs/Kyle Training Center, TN	1.08	0.02
Robins Air Force Base, GA	0.06	0.00
University of Georgia, GA		
Fort Gordon, GA	60.44	3.54
Fort Stewart, GA	2.23	0.00
Kings Bay Naval Submarine Base, GA	1.12	0.00
U.S. Marine Corps Recruiting Depot–Parris Island, SC	29.10	0.00

Table 392.
Quantity of Archaeological Collections Examined (Continued)

Repository/Installations	Cubic Feet	Linear Feet
University of Iowa, IA		
Fort Des Moines, IA	1.91	0.10
Iowa Army Ammunition Plant, IA	16.81	0.06
Illinois State Museum, IL		
Camp Lincoln, IL (ILARNG)	52.96	2.70
Fort Leonard Wood, MO	0.00	4.96
Joliet Army Ammunition Plant, IL	5.09	0.71
Marseilles Training Area, IL (ILARNG)	2.93	0.83
Savanna Army Depot, IL	1.96	0.96
Rock Island Arsenal Museum, IL		
Rock Island Arsenal, IL	2.87	0.15
U.S. Army Construction Engineering Research Laboratory (USACERL), IL		
Fort Leonard Wood, MO	82.67	5.92
University of Illinois, IL		
Fort Leonard Wood, MO	1.17	0.48
Ball State University, IN		
Camp Atterbury, IN	10.24	5.61
Grissom Air Force Base, IN	2.24	0.88
Newport Army Ammunition Plant, IN	3.56	0.31
Glenn A. Black Laboratory of Archaeology, IN		
Camp Atterbury, IN	6.55	0.00
Indiana Army Ammunition Plant, IN	1.73	0.00
Jefferson Proving Ground, IN	1.09	2.71
Newport Army Ammunition Plant, IN	2.46	0.27
Indiana State Museum, IN		
Fort Benjamin Harrison, IN	48.27	6.95
Indiana State University, IN		
Jefferson Proving Ground, IN	1.12	0.02
Newport Army Ammunition Plant, IN	2.24	0.08
University of Kansas, KS		
Lake City Army Ammunition Plant, MO	0.84	0.03
University of Louisville, KY		
Fort Knox, KY	16.36	1.15
Cultural Resources Analysts, Inc., KY		
Fort Campbell, KY	2.19	0.54
Fort Campbell, KY		
Fort Campbell, KY	39.49	11.92
Fort Knox, KY		
Fort Knox, KY	7.85	9.08
U.S. Army Corps of Engineers, Louisville District, KY		
Joliet Army Ammunition Plant, IL	0.06	0.00
Lexington Blue Grass Army Ammunition Plant, KY	1.41	0.00
Newport Army Ammunition Plant, IN	0.06	0.00
University of Kentucky, KY		
Eastern Kentucky Training Site, KY	8.33	0.59
Fort Campbell, KY	0.00	0.33
Fort Knox, KY	41.67	4.54
Kentucky National Guard, KY	1.04	0.00
Lexington Blue Grass Army Ammunition Plant, KY	4.19	2.43
Timelines, Inc., MA		
Army Materials Technology Laboratory - Watertown Arsenal, MA	2.24	0.28

Table 392.
Quantity of Archaeological Collections Examined (Continued)

Repository/Installations	Cubic Feet	Linear Feet
University of Massachusetts, MA		
Hanscom Air Force Base, MA	1.12	0.75
Smithsonian Institution Museum Support Center, MD		
Fort Knox, KY	6.18	0.06
Fort Leonard Wood, MO	44.54	0.17
Redstone Arsenal, AL	31.80	0.19
U.S. Military Academy, West Point, NY	0.87	0.00
Watervliet Arsenal, NY	2.23	0.02
University of Maine, ME		
Bog Brook Army National Guard Base, ME	3.26	0.40
Hollis Army National Guard Base, ME	1.09	0.21
Loring Air Force Base, ME	5.61	3.10
Bureau of Michigan History, Office of State Archaeology, MI		
Camp Grayling, MI	0.003	0.01
K. I. Sawyer Air Force Base, MI	1.83	0.51
Wurt-Smith Air Force Base, MI	0.34	0.41
Commonwealth Cultural Resource Group, MI		
Camp Grayling, MI	20.39	0.08
Great Lakes Research, MI		
Camp Grayling, MI	3.73	1.25
Jefferson Barracks, MO		
Jefferson Barracks, MO	7.22	0.05
Southwest Missouri State University, MO		
Fort Leonard Wood, MO	0.19	0.15
University of Missouri-Columbia, MO		
Fort Leonard Wood, MO	124.37	9.21
University of Missouri-St. Louis, MO		
Jefferson Barracks, MO	4.20	0.44
Washington University, MO		
Jefferson Barracks, MO	2.14	0.02
Camp Lejeune Marine Corps Base, NC		
Camp Lejeune Marine Corps Base, NC	1.11	0.00
Fort Bragg, NC		
Camp Mackall, NC	0.00	0.69
Fort Bragg, NC	97.81	22.96
New South Associates, NC		
Fort Bragg, NC	1.79	0.69
North Carolina Office of State Archaeology, NC		
Military Ocean Terminal, Sunny Point, NC	36.35	1.02
University of North Carolina-Chapel Hill, NC		
Marine Corps Air Station Cherry Point, NC	5.61	0.00
TRC Garrow & Associates, NC		
Camp Lejeune Marine Corps Base, NC	11.73	5.40
Fort Bragg, NC	4.36	3.50
New Boston Air Force Station, NH		
New Boston Air Force Station, NH	9.38	0.08
New Hampshire Division of Historic Resources, NH		
Pease Air Force Base, NH	5.49	1.50
Portsmouth Naval Shipyard Museum, NH		
Portsmouth Naval Shipyard, NH	1.09	0.04

Table 392.
Quantity of Archaeological Collections Examined (Continued)

Repository/Installations	Cubic Feet	Linear Feet
Hunter Research, NJ		
Fort Dix, NJ	10.51	3.83
Fort Indiantown Gap, PA	0.00	0.27
McGuire Air Force Base, NJ	1.19	0.00
Louis Berger & Associates, NJ		
Camp Lejeune Marine Corps Base, NC	17.70	4.77
New Jersey State Museum, NJ*		
Fort Dix, NJ	1.56	0.21
Ecology & Environment, Inc., NY		
Naval Construction Battalion Center, Davisville, RI	3.33	1.94
Naval Material Data System Group, Morgantown, WV	0.09	0.17
Naval Submarine Base, New London, CT	0.09	0.50
Naval Weapons Station, Earle, NJ	0.09	0.29
Fort Drum, NY		
Fort Drum, NY	922.41	107.56
U.S. Military Academy, West Point, NY	0.02	0.17
Fort Hamilton Harbor Defense Museum, NY		
Fort Hamilton, NY	0.50	0.00
Panamerican Consultants, Inc., NY		
Fort Hamilton, NY	2.22	0.00
Griffiss Air Force Base, NY	10.00	4.77
Picatinny Arsenal, NJ	1.20	1.83
U.S. Military Academy, West Point, NY	1.20	2.63
Seneca Army Depot, NY		
Seneca Army Depot, NY	1.40	0.04
Staten Island Institute of Arts and Science, NY		
Fort Wadsworth, NY	1.09	0.17
TAMS Consultants, Inc., NY		
Naval Station Brooklyn, NY	1.26	1.23
Naval Underwater Weapons Center, New London, CT	1.26	0.04
Naval Weapons Industrial Reserve Plant, NY	8.85	0.52
U.S. Military Academy, West Point, NY		
U.S. Military Academy, West Point, NY	37.11	6.71
Watervliet Arsenal, NY		
Watervliet Arsenal, NY	1.51	0.10
Cleveland State University, OH		
Ravenna Army Ammunition Plant	4.47	0.50
Archaeological & Historical Consultants, PA		
Carlisle Barracks, PA		2.33
Carlisle Barracks, PA		
Carlisle Barracks, PA	62.11	2.81
Fort Indiantown Gap, PA		
Fort Indiantown Gap, PA	1.13	0.00
John Milner & Associates, PA		
Frankford Arsenal, PA	6.14	0.00
Navy Ships Parts Control Center, PA	0.33	0.17
The State Museum of Pennsylvania, PA		
Letterkenny Army Depot, PA	1.71	0.08

Table 392.
Quantity of Archaeological Collections Examined (Continued)

Repository/Installations	Cubic Feet	Linear Feet
Public Archaeological Laboratory, Inc., RI		
94th ARCOM–New England States (NH, ME, MA, CT, RI, VT)	0.12	0.83
Army Materials Technology Laboratory–Watertown Arsenal, MA	1.43	1.07
Charleston Naval Field, RI	0.00	0.27
Detroit Arsenal, MI	0.00	0.29
Fort Devens, MA	23.19	3.32
Hanscom Air Force Base, MA	0.17	0.72
Massachusetts Military Reservation, MA	1.20	1.09
Naval Station Brooklyn, NY	0.00	0.55
New Boston Air Force Base, NH	0.00	1.33
Picatinny Arsenal, NJ	0.00	0.40
U.S. Air Force Ground-Wave Emergency Network Transmission Site, RI	0.00	0.06
Westover Air Force Base, MA	0.23	0.26
Fort Jackson, SC		
Fort Jackson, SC	1.00	0.33
Parris Island Museum, SC		
Beaufort Naval Hospital, SC	0.24	0.00
U.S. Marine Corps Recruiting Depot - Parris Island, SC	22.27	1.84
South Carolina Institute of Archaeology & Anthropology (SCIAA), SC		
Beaufort Naval Hospital, SC	0.92	0.13
Charleston Naval Weapons Station, SC	4.60	1.00
Fort Jackson, SC	44.82	2.63
McEntire Air National Guard Base, SC	4.50	0.39
Myrtle Beach Air Force Base, SC	0.89	0.15
U.S. Marine Corps Recruiting Depot - Parris Island, SC	695.47	54.86
Duvall & Associates, TN		
Fort Campbell, KY	3.36	1.48
University of Tennessee-Chattanooga, TN		
Hunter Army Air Field, GA	0.00	0.25
Kings Bay Naval Submarine Base, GA	0.00	1.08
Panamerican Consultants, Inc., TN		
Fort Campbell, KY	17.02	2.39
Pinson Mounds Archaeological Park, TN		
Fort Campbell, KY	1.18	0.00
Holston Army Ammunition Plant, TN	3.27	0.24
University of Tennessee-Knoxville, TN		
Arnold Air Force Base, TN	14.58	2.67
Parson's Engineering Science, Inc., VA		
Avon Park Air Force Range, FL	3.12	0.00
Camp Smith, NY	0.07	0.00
Charleston Air Force Base, SC	2.35	0.13
Dover Air Force Base, DE	0.00	1.54
Plattsburgh Air Force Base, NY	21.19	0.33
Pope Air Force Base, NC	0.02	0.06
Tetra Tech, VA		
Camp Kilmer, NJ	2.54	0.67
Camp Pedricktown, NJ/Camp Kilmer, NJ/Bellemore Logistics Facility, NY/Fort Totten, NY	0.00	1.29
Fort Totten, NY	13.52	0.71
Iowa Army Ammunition Plant, IA	14.64	0.00
Pedricktown Support Facility, NJ	5.07	0.08
Archaeological Consulting and Services, Inc., WI		
Badger Army Ammunition Plant, WI	0.11	0.00
Volk Field Air National Guard Base, WI	2.16	0.30

Table 392.
Quantity of Archaeological Collections Examined (Continued)

Repository/Installations	Cubic Feet	Linear Feet
Fort McCoy, WI		
Fort McCoy, WI	29.17	31.30
University of Wisconsin–LaCrosse, WI		
Fort McCoy, WI	2.16	4.39
State Historical Society of Wisconsin, WI		
Fort McCoy, WI	19.17	0.52

* These repositories do not have chapters associated with them for reasons that are cited in the Executive Summary of this report.

A complete building evaluation was completed for all facilities except those noted in the Executive Summary of this report. Information derived from the building evaluation was used to determine the level of compliance with 36 CFR Part 79 for each repository. In summary, the following can be concluded: Sixteen of the 132 repositories housing military collections meet the minimum standards of 36 CFR Part 79 (Table 393).

Table 393.
Criteria to Determine if Repositories Meet the Minimum Requirements of 36 CFR Part 79

Repository	Fire Safety	Security	Environmental Controls	Pest Management	Meets Minimum 36 CFR Part 79 Standards
Archaeological & Historical Consultants	No	No	No	No	No
Archaeological Consulting and Services, Inc.	No	No	Yes	Yes	No
Arkansas State University	No	No	No	No	No
Auburn University	No	No	Yes	No	No
Avon Park Air Force Range	No	Yes	Yes	Yes	No
Ball State University	No	No	Yes	No	No
Bureau of Michigan History, Office of State Archaeology	Yes	No	No	No	No
Camp Lejeune Marine Corps Base	No	No	Yes	No	No
Cape Canaveral Air Station	Yes	No	No	Yes	No
Carlisle Barracks	Yes	No	Yes	No	No
Carolyn Rock	No	No	No	No	No
Cleveland State University	Yes	No	Yes	No	No
Commonwealth Cultural Resource Group	No	No	Yes	No	No
Cultural Resources Analysts, Inc.	Yes	Yes	Yes	No	No
DuVall & Associates	No	No	No	No	No
ECG, Inc.	Yes	No	Yes	No	No
Ecology & Environment, Inc.	No	No	No	Yes	No
Edward Heite Consulting	No	No	No	No	No
Eglin Air Force Base					
Repository 1	Yes	Yes	No	No	No
Repository 2	No	No	Yes	Yes	No
Environmental Services, Inc.	No	No	No	No	No
Florida Archaeological Services	Yes	No	Yes	Yes	No
Florida Bureau of Archaeological Research	Yes	No	Yes	Yes	No
Florida Museum of Natural History					
Repository 1	No	Yes	No	Yes	No
Repository 2	No	No	No	Yes	No
Florida State University	Yes	Yes	Yes	Yes	Yes
Fort Bragg	No	No	Yes	No	No
Fort Campbell	Yes	No	Yes	Yes	No

Table 393.
Criteria to Determine if Repositories Meet the Minimum Requirements of 36 CFR Part 79

Repository	Fire Safety	Security	Environmental Controls	Pest Management	Meets Minimum 36 CFR Part 79 Standards
Fort Chaffee	No	No	Yes	Yes	No
Fort Drum					
Repository 1	No	Yes	No	Yes	No
Repository 2	No	Yes	No	Yes	No
Fort Hamilton Harbor Defense Museum	No	Yes	Yes	No	No
Fort Indiantown Gap	No	No	Yes	No	No
Fort Jackson					
Repository 1	No	No	Yes	Yes	No
Repository 2	No	No	No	Yes	No
Fort Knox	No	No	Yes	Yes	No
Fort McClellan	Yes	No	Yes	Yes	No
Fort McCoy	Yes	Yes	Yes	Yes	Yes
Fort Rucker	Yes	No	Yes	No	No
Fort Stewart	Yes	No	Yes	Yes	No
Glenn A. Black Laboratory of Archaeology	Yes	No	No	No	No
Great Lakes Research Associates	No	No	Yes	No	No
Hunter Research	Yes	No	No	No	No
Hurlburt Field	Yes	No	Yes	Yes	No
Illinois State Museum	Yes	Yes	No	Yes	No
Indian Temple Mound Museum	Yes	Yes	Yes	Yes	Yes
Indiana State Museum	No	No	No	Yes	No
Indiana State University					
Repository 1	No	No	Yes	Yes	No
Repository 2	No	No	Yes	Yes	No
Jacksonville State University	No	No	Yes	Yes	No
Jefferson Barracks	Yes	Yes	Yes	Yes	Yes
John Milner & Associates	Yes	No	Yes	No	No
Key West Art and Historical Society	Yes	Yes	No	Yes	No
Louis Berger & Associates	No	No	Yes	No	No
Mid-Atlantic Archaeological Research (MAAR)	No	No	No	No	No
Naval Air Station Pensacola					
Repository 1	No	No	No	Yes	No
Repository 2	No	No	No	No	No
Repository 3	No	No	No	Yes	No
Repository 4	No	No	Yes	Yes	No
New Boston Air Force Station	Yes	Yes	No	No	No
New Hampshire Division of Historic Resources	No	No	No	No	No
New South Associates	No	No	Yes	No	No
North Carolina Office of State Archaeology					
Repository 1	Yes	No	Yes	No	No
Repository 2	Yes	Yes	Yes	Yes	Yes
Panamerican Consultants, Inc., New York	No	No	No	No	No
Panamerican Consultants, Inc., Alabama	Yes	Yes	Yes	Yes	Yes
Panamerican Consultants, Inc., Tennessee	Yes	Yes	Yes	Yes	Yes
Parris Island Museum	Yes	Yes	No	No	No
Parsons Engineering Science, Inc.	Yes	No	Yes	Yes	No
Pensacola Archaeological Laboratory	No	No	No	Yes	No
Pensacola Historical Society Museum	No	Yes	Yes	No	No
Pinson Mounds Archaeological Park	No	Yes	Yes	Yes	No
Portsmouth Naval Shipyard Museum	Yes	No	Yes	No	No
Prentice Thomas & Associates					
Repository 1	Yes	Yes	Yes	No	No
Repository 2	Yes	Yes	Yes	Yes	Yes
Public Archaeological Laboratory, Inc.	No	Yes	Yes	No	No

Table 393.
Criteria to Determine if Repositories Meet the Minimum Requirements of 36 CFR Part 79 (Continued)

Repository	Fire Safety	Security	Environmental Controls	Pest Management	Meets Minimum 36 CFR Part 79 Standards
Redstone Arsenal					
Repository 1	Yes	No	Yes	No	No
Repository 2	Yes	No	Yes	No	No
Robins Air Force Base	No	Yes	Yes	No	No
Rock Island Arsenal Museum	No	Yes	Yes	No	No
Seneca Army Depot	Yes	No	No	Yes	No
Smithsonian Institution Museum Support Center					
Repository 1	Yes	Yes	Yes	Yes	Yes
Repository 2	Yes	Yes	Yes	Yes	Yes
Repository 3	Yes	Yes	Yes	Yes	Yes
South Carolina Institute of Archaeology and Anthropology (SCIAA)					
Repository 1	Yes	Yes	No	Yes	No
Repository 2	No	Yes	No	Yes	No
Southeast Archaeological Center	No	No	Yes	No	No
Southeastern Archaeological Services	No	No	Yes	Yes	No
Southwest Missouri State University	Yes	Yes	No	Yes	No
State Historical Society of Wisconsin	No	Yes	Yes	Yes	No
Staten Island Institute of Arts & Science	No	Yes	Yes	No	No
T.T. Wentworth Jr. Florida State Museum	No	Yes	Yes	No	No
TAMS Consultants, Inc.	Yes	Yes	Yes	No	No
Tetra Tech					
Repository 1	Yes	No	Yes	No	No
Repository 2	No	No	Yes	No	No
The State Museum of Pennsylvania	Yes	Yes	Yes	Yes	Yes
The University of West Florida					
Repository 1	No	No	Yes	Yes	No
Repository 2	Yes	Yes	Yes	Yes	Yes
Repository 3	No	No	Yes	Yes	No
Timelines, Inc.	Yes	Yes	Yes	No	No
TRC Garrow & Associates, Georgia	Yes	Yes	No	Yes	No
TRC Garrow & Associates, North Carolina	No	No	Yes	No	No
Troy State University	No	No	Yes	Yes	No
Tyndall Air Force Base					
Repository 1	Yes	No	Yes	Yes	No
Repository 2	Yes	No	Yes	No	No
U.S. Army Construction Engineering Research Laboratory (USACERL)	Yes	No	Yes	Yes	No
U.S. Army Corps of Engineers, Louisville District	Yes	Yes	Yes	Yes	Yes
U.S. Military Academy, West Point	No	No	Yes	Yes	No
University of Alabama					
Repository 1	Yes	Yes	No	No	No
Repository 2	Yes	Yes	No	Yes	No
Repository 3	Yes	No	No	Yes	No
University of Arkansas	Yes	Yes	No	Yes	No
University of Arkansas Museum	Yes	No	No	No	No
University of Connecticut	Yes	Yes	Yes	Yes	Yes
University of Georgia					
Repository 1	Yes	No	Yes	No	No
Repository 2	Yes	Yes	Yes	Yes	Yes
University of Illinois	Yes	Yes	Yes	No	No
University of Iowa	No	No	Yes	Yes	No
University of Kansas	No	No	No	No	No
University of Kentucky	Yes	Yes	No	Yes	No

Table 393.
Criteria to Determine if Repositories Meet the Minimum Requirements of 36 CFR Part 79 (Continued)

Repository	Fire Safety	Security	Environmental Controls	Pest Management	Meets Minimum 36 CFR Part 79 Standards
University of Louisville	No	No	No	No	No
University of Maine					
Repository 1	No	No	No	No	No
Repository 2	Yes	No	No	No	No
University of Massachusetts	Yes	No	No	No	No
University of Missouri-Columbia	Yes	Yes	No	Yes	No
University of Missouri-St. Louis	No	No	Yes	No	No
University of North Carolina-Chapel Hill	Yes	No	No	No	No
University of Tennessee-Chattanooga	No	No	Yes	Yes	No
University of Tennessee-Knoxville	No	No	Yes	No	No
University of Wisconsin-LaCrosse	Yes	No	Yes	Yes	No
Washington University	No	No	No	Yes	No
Watervliet Arsenal	Yes	No	No	Yes	No

Note: Repositories that have been determined to meet the *minimum* requirements for 36 CFR Part 79 possess the following: Adequate **Fire Safety** indicates that fire detection *and* suppression capabilities are present in the system being used. Adequate **Security** indicates that intrusion detection *and* deterrent capabilities are present in the system being used. Adequate **Environmental Controls** indicates that air conditioning and heat is provided in the repository and collections area. Adequate **Pest Management** indicates that *regular* monitoring *and* control for pests occurs in the repository.

Besides evaluating each repository, each type of material (e.g., artifacts, records, human remains) was also evaluated to determine its level of rehabilitation (Table 394). This information is pertinent in order to more fully understand what each collection requires to bring it into compliance with existing federal standards and guidelines.

Seventy-three artifact collections require complete rehabilitation and 27 require partial rehabilitation. Only 3 artifact collections comply with federal guidelines. Ninety-seven record collections require complete rehabilitation and four require partial rehabilitation. None of the record collections comply with federal guidelines. Similarly, of the 11 skeletal collections identified, six skeletal collections require a NAGPRA-compliance examination while five have already had one conducted.

Table 394.
Level of Rehabilitation for Examined Collections

State	Repository	Artifacts	Records	Human Remains
Alabama	Auburn University	Complete	Complete	None
	ECG, Inc.	None	Complete	None
	Fort McClellan	Partial	Complete	None
	Fort Rucker	Complete	Complete	None
	University of Alabama	Complete	Partial	NAGPRA completed
	Jacksonville State University	Complete	Complete	None
	Panamerican Consultants	Complete	Complete	None
	Redstone Arsenal	Complete	None	None
	Troy State University	Complete	None	None
Arkansas	Arkansas Archeological Survey	Partial	Complete	None
	Arkansas State University	Partial	Complete	None
	Fort Chaffee	None	Complete	None
	University of Arkansas Museum	Partial	Complete	None
Connecticut	University of Connecticut	Complete	Complete	None

Table 394.
Level of Rehabilitation for Examined Collections (Continued)

State	Repository	Artifacts	Records	Human Remains
Delaware	Heite Consulting	Complete	Complete	None
	Mid-Atlantic Archaeological Research, Inc.	Complete	Complete	None
Florida	Avon Park Air Force Range	Complete	Complete	Needs examination
	Cape Canaveral Air Force Station	None	Complete	None
	Eglin Air Force Base	Complete	Complete	None
	Environmental Services, Inc.	Partial	Complete	None
	Florida Archaeological Services	Partial	Complete	None
	Florida Bureau of Archaeological Research	Complete	Complete	NAGPRA completed
	Florida State University	Complete	Complete	Needs examination
	Hurlburt Field	None	Complete	None
	Indian Temple Mound Museum	Complete	Complete	None
	Florida Museum of Natural History	Complete	Complete	Needs examination
	Key West Art and Historical Society	Complies	None	None
	Pensacola Archaeology Laboratory	None	Complete	None
	Pensacola Historical Society Museum	Partial	None	None
	Pensacola Naval Air Station	Complete	Complete	None
	Prentice Thomas and Associates	Complete	Complete	None
	Southeast Archeological Center	Complete	Complete	None
	T.T. Wentworth Jr. Florida State Museum	Partial	Complete	None
	Tyndall Air Force Base	Complete	Complete	None
	University of West Florida	Complete	Complete	Needs examination
Georgia	Fort Stewart	Complete	Complete	NAGPRA completed
	Robins Air Force Base Museum of Aviation	Complete	Complete	None
	Carolyn Rock	Complete	Complete	None
	Southeastern Archeological Services	Complete	Complete	None
	TRC Garrow and Associates	Complete	Complete	None
	University of Georgia	Complete	Complete	None
Illinois	Illinois State Museum	Complete	Complete	None
	Rock Island Arsenal Museum	Complete	Complete	None
	University of Illinois	Partial	Complete	None
	USACE, Construction and Engineering Laboratory	Complete	Complete	Needs examination
Indiana	Ball State University	Complete	Complete	None
	Glenn A. Black Laboratory	Partial	Complete	None
	Indiana State Museum	Complete	Complete	None
	Indiana State University	Complete	Complete	None
Iowa	University of Iowa	Complete	Complete	None
Kansas*	University of Kansas	Partial	Complete	None
Kentucky	Cultural Resource Analysts	Partial	Complete	None
	Fort Campbell	Complies	Complete	NAGPRA completed
	Fort Knox	Complete	Complete	None
	University of Kentucky	Complete	Complete	None
	University of Louisville	Complete	Complete	None
	USACE, Louisville District	Complete	None	None
Maine	University of Maine	Complete	Complete	None
Maryland	Smithsonian Institution Museum Support Center	Partial	Partial	None
Massachusetts	Timelines, Inc.	Partial	Complete	None
	University of Massachusetts	Partial	Complete	None
Michigan	Bureau of Michigan History	Complete	Complete	None
	Great Lakes Research Associates	Complete	Complete	None
	Commonwealth Cultural Resources Group	Complete	Complete	None

Table 394.
Level of Rehabilitation for Examined Collections (Continued)

State	Repository	Artifacts	Records	Human Remains
Missouri	University of Missouri-Columbia	Complete	Complete	NAGPRA completed
	Jefferson Barracks	Complete	Complete	None
	Southwest Missouri State University	Partial	Partial	None
	University of Missouri-St. Louis	Complete	Complete	None
	Washington University	Complete	Partial	None
New Hampshire	New Boston Air Force Station	Partial	Complete	None
	Portsmouth Naval Shipyard	Complete	Complete	None
	New Hampshire Division of Historic Resources	Complete	Complete	None
New Jersey	Hunter Research	Complete	Complete	None
	Louis Berger and Associates	Partial	Complete	None
New York	Ecology and Environment, Inc.	Partial	Complete	None
	Fort Drum	Complete	Complete	None
	Fort Hamilton	Partial	None	None
	Panamerican Consultants	Partial	Complete	None
	Seneca Army Depot	Complete	Complete	None
	Staten Island Institute of Arts and Science	Complete	Complete	None
	TAMS Consultants	Complete	Complete	Needs examination
	Watervliet Arsenal Museum	Complete	Complete	None
	West Point Military Academy	Complete	Complete	None
North Carolina	Camp Lejeune	Complete	None	None
	Fort Bragg	Complies	Complete	None
	New South Associates	Complete	Complete	None
	North Carolina Office of State Archaeology	Partial	Complete	None
	TRC Garrow and Associates	Complete	Complete	None
	University of North Carolina	Complete	None	None
Ohio	Cleveland State University	Partial	Complete	None
Pennsylvania	Archaeological and Historical Consultants	None	Complete	None
	Carlisle Barracks	Complete	Complete	None
	Fort Indiantown Gap	Complete	None	None
	John Milner Associates, Inc.	Complete	Complete	None
	The State Museum of Pennsylvania	Partial	Complete	None
Rhode Island	Public Archaeological Laboratory	Partial	Complete	None
South Carolina	Fort Jackson	Complete	Complete	None
	Parris Island Marine Corps Depot	Complete	Complete	None
	South Carolina Institute of Archaeology and Anthropology	Complete	Complete	None
Tennessee	DuVall and Associates, Inc.	Complete	Complete	None
	Panamerican Consultants, Inc.	Complete	Complete	None
	Pinson Mounds Museum	Complete	Complete	None
	University of Tennessee-Chattanooga	None	Complete	None
	University of Tennessee-Knoxville	Partial	Complete	None
Virginia	Parsons Engineering Science, Inc.	Partial	Complete	None
	Tetra Tech	Complete	Complete	None
Wisconsin	Archaeological Consulting and Services, Inc.	Complete	Complete	None
	Fort McCoy	Complete	Complete	None
	State Historical Society of Wisconsin	Complete	Complete	None
	University of Wisconsin, LaCrosse	Complete	Complete	None

* This state, which falls outside of the project area, is listed because it was found to contain a repository that currently holds collections from an installation located within the project boundary.

Note: Artifact and record rehabilitation was based on the number of tasks remaining to be performed on each collection. Tasks are listed in the Recommendations section of each chapter. In cases where 0-2 tasks were recommended a rating of partial rehabilitation was issued, in cases where 3 or more tasks were recommended a rating of complete rehabilitation was issued. If a collection is listed as Complies it indicates that the materials comply with federal guidelines and regulations and if None is listed then the collection does not have that particular material type. Under Human Remains the indication refers to whether or not a NAGPRA assessment has been completed. If no Human Remains are located at the repository the listing is recorded as None.

Archaeological Material Curation

As noted in the Executive Summary of this report 132 repositories house DoD archaeological collections, however, only 16 meet the minimum requirements of 36 CFR Part 79. None of these facilities has properly prepared the all parts of their collections for long-term curation.

Primary containers (boxes that house a group of archaeological materials) consist mainly of acidic cardboard boxes (51%) of varying sizes (most in the 1.0 ft^3 range). Acid-free cardboard boxes are utilized (29%), but not to the extent necessary for the proper curation of the collections. Twenty percent of the total consists of other types of containers such as, small boxes, plastic vials, and cardboard flats. Similarly, boxes that use a telescoping lid for security and access are present in the collection, but not to the degree that would ensure longer life for the box and easier access to the collections. Most boxes contain some sort of label, if only rudimentary and many containers were over packed and coated with dust.

Most of the collections (85%) are stored in polyethylene zip-lock bag secondary containers (those included within the primary container). Many of these plastic bags need to be replaced because of tears or increasing brittleness caused by storage in environments lacking proper temperature controls. The remaining 15% is stored in paper bags, small acidic or non-acidic cardboard boxes, loose in the primary containers, without secondary containers, or in variety of other types of containers which are detailed in the chapters.

Human Skeletal Remains

Human skeletal remains and associated burial goods comprise 0.03 percent of the collection. In those cases where it has not already been done, all human remains should be examined by a qualified physical anthropologist. Additionally, complete rehabilitation (e.g., reboxing, rebagging, labeling) should be carried out in order to stabilize the remains and a complete inventory should be generated in order to comply with the Native American Grave and Repatriation Act (U.S.C. 25 3001 et seq.).

Records Management

Records associated with archaeological work conducted on DoD installations encompass 653 linear feet and include paper, photographic, maps, and draft report records. In many cases, paper records are not housed in acid-free folder, photographs are not isolated and stored in chemically inert sleeves, and large-scale maps are not stored flat in map drawers. In most cases documentation for the collections has either been misplaced over the years or simply was not curated with the archaeological materials after fieldwork was completed.

Additionally, most records housed in the repositories are subject to temperature and humidity fluctuations. Archive materials readily absorb and release moisture, leading to expansion and contraction, dimensional changes that accelerate deterioration and promote major visible damage such as cockling paper, flaking ink, warped covers on books, and cracked emulsion on photographs.

Management Controls

As noted earlier in this report, detailed data on this topic were not a primary point of examination in the current research, the majority of repositories holding these archaeological collections maintain some type of internal management policies. These policies range from comprehensive curation plans with accommodations made for every portion of the collection to more basic polices that are aimed at preparing collections for deposition in a dedicated long-term storage repository.

Prior to this collections assessment, the Department of Defense was unfamiliar with the extent, location, or conditions of its archaeological collections in the project area states. DoD personnel should be commended for recognizing this problem and addressing it, but now that specific deficiencies have been identified, action must be taken to protect these collections. At minimum a plan of action for the long-term management of the collections should implement the following four terms.

1. Inventory all human skeletal remains to comply with NAGPRA.

2. Establish a priority for the collections and their rehabilitation.

3. Inventory and rehabilitate the collections.

4. Develop an Archives Management Plan.

Implementation of these minimal tasks will contribute greatly to our understanding of the culture history of not only the eastern United States, but also of North America.

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Appendix 1

Military Installations With No Known or Locatable Archaeological Collections

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