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Rare Smew Sighting at Riverlands

By Hope Pollmann,
Park Ranger, Rivers Project

On Saturday, January 13th, members of the St. Louis Audubon Society and Webster Groves Nature Study Society recorded the rare sighting of a Smew, an individual male, at the Clark Bridge, near Riverlands Environmental Demonstration Area. The Smew is a Eurasian merganser, a diving, fish-eating sea duck, native to Siberia, the northern Pacific, and the Arctic. In North America, Smews are found



Female (top) and male (bottom) Smew. A lone male attracted thousands of visitors to Riverlands.



Excited bird watchers came from all over the country to record the rare sighting.

The Smew, *Mergellus albellus*, has a dark, relatively short bill. The female has a white throat and lower face, with a reddish head and nape. Males are white, with a black mask and black markings on the body. In flight, the Smew has conspicuous black-and-white wings. The Smew is considered an accidental species in most of North America. The term *accidental* is used when referencing a species that has only been recorded a few times in an area considered to be far

as rare vagrants in the westernmost islands of Alaska. Never previously spotted in Missouri, its sighting here is the first ever recorded in the St. Louis area. Over a week-end, birders from across the country came to West Alton for the opportunity to see the Smew. Visitation at the Rivers Project Office tripled with nearly 4500 visitors on one weekend.

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Commander's Perspective

Executive Office Changes: A Fond Farewell and a Warm Welcome



COL Michael R. Morow

If we don't practice Safety First, nothing else matters.

This month we bid farewell to the District Executive Officer, Major Emmett Wood. Major Wood has served with distinction in the St. Louis District for almost five years. Major Wood was responsible for running the district staff, a job he took very seriously. Computer upgrades, credit card implementation, logistical support and staff updates were among his numerous accomplishments. Major Wood helped several District Engineers transition into their jobs with professionalism and total dedication to the numerous missions of the district. I have relied on his sound judgment and sage advice and will personally miss him. Major Wood and his family recently bought an old farmhouse in Edwardsville, Illinois, I believe the real estate term used was “handyman’s special”. I will miss the daily updates he delivered with such enthusiasm about sanding floors, fixing gutters and the joys of “elbow grease equity”. The sad stories he told with such passion about tennis elbow, poison ivy and other such ailments will become a thing of the past. I will miss his adventures of catching the bus and the lectures on the benefits of public transportation. No longer will I smell Raman noodles wafting through the office at all times of the day. Birthday cake, donuts and cookies brought in for special occasions will actually be available as leftovers for the next day. These are the things memories are made of. We will miss Emmett, his lovely wife Lisa and their children Ben, Jane and Joanna. Emmett will be taking a position in the civilian world and we wish him and his family all the best and God speed.

Major Wood’s replacement is a known entity in the district, Major Ben Bigelow. Major Bigelow was selected for promotion on the last major’s promotion board and has served in the district at the FUSRAP site, as well as serving a tour in Kosovo. Major Bigelow will take over as the district executive officer upon Major Wood’s departure. We welcome Major Bigelow and his wife Shannon.

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Major Ben Bigelow To Be New Deputy District Engineer



Although he has been working here in the St. Louis District for over two years, MAJ Ben Bigelow may not be a familiar face for the majority of the district personnel. He has been working with the FUSRAP program as

both the lead engineer and project manager for the St. Louis Downtown Site (SLDS) and also spent six months in Kosovo from April to October 2000.

MAJ Bigelow is a native of Bellows Falls, Vermont but he spent little time there as a child. He is an “army brat” who has lived all over the United States and in Germany. After much discussion, he chose to follow in his father’s footsteps and graduated from the United States Military Academy at West Point in 1990 with a Bachelor of Science degree in Engineering. Since entering the army he has served in Germany, Iraq, Saudi Arabia, Kuwait, Haiti, Kosovo and numerous stateside installations.

MAJ Bigelow's first assignment in the army was in Germany. Upon arrival in Germany, he immediately deployed with his unit to Operation Desert Shield/Storm. Once operations in the desert were complete, he was able to return to Germany and enjoy three years of the best skiing in the world (along with many months deployed to exercises and training). His next assignment was at Fort Bragg, North Carolina where he served in the 20th Engineer Brigade and met and married his wife Shannon. Shannon is a insurance litigation adjuster who also happens to be a lawyer.

MAJ Bigelow then attended the University of Texas at Austin and earned a Master of Science Degree in Civil Engineering in 1998 with an emphasis in Environmental Engineering and Project Management. His research was a project with the Hydrologic Engineering Center marrying a GIS with HMS to offer more options on analysis of flood hydrology in the Upper Mississippi Basin.

He then was offered and chose St. Louis as his next assignment. Although the time in St. Louis has been challenging and busy, he still gets time to spend with his wife and two cats. He looks forward to meeting many of the staff and facing the new challenges of his new job soon.

(A photo of the Bigelow family, including cats, Archie and Oliver, was not available at this time, but will appear in the next Esprit.)

Editor's note- Despite rumors to the contrary, and before the family photo is published, MAJ Bigelow wants all to know that Archie and Oliver **are not fat**--they are big-boned.

Special Note: Major Wood's farewell address will appear in the April Esprit upon his departure.

Main Lock at Mel Price Remains Closed: Economic Impact of 2nd Lock Realized

By Chuck Camillo

The main lock chamber at the Melvin Price Locks and Dam remains closed for repairs as the result of a failure of the Illinois-side miter gate on 29 Dec 2000. During the flushing of ice from the 1200-foot main chamber, the mechanical system that holds the miter gate in the recessed position failed. The force of the ice and the river’s current prompted the gate to extend beyond the normal miter position.

Structural engineers, maintenance crews, and floating plant equipment from the Rock Island District and the St. Louis District Service Base immediately mobilized to the site. To date, bulkheads have been set, the miter gate monolith dewatered, and the damaged miter gate lifted and inspected. The extent of the repair period will be

Smew (cont'd from page 1)

out of its normal range. Potentially most species of bird could show up nearly anywhere, and birders must be very careful when identifying accidentals. The Peterson Field Guides, National Geographic Society Field Guides, National Audubon Society Field Guides, and many other guides and references are available to aid in species identification.

Rare sightings are nothing new to the Riverlands. The Webster Groves Nature Society has published in "Birds of St. Louis," a list of significant new record sightings for the St. Louis area, a third of which have occurred at Riverlands Environmental Demonstration Area. Those recorded at Riverlands Environmental Demonstration Area prior to 31 December 1997 include the Red-throated Loon, White Pelican, Wood Stork, Greater White-fronted Goose, Surf Scoter, Swainson's Hawk, Black-necked Stilt, Red Phalarope, Pomarine Jaeger, Glaucous-winged Gull, and Great-tailed Grackle. The recent Smew sighting, along with the Ross' Gull a few years ago and other species can also be added to that list.

With its accessibility and close proximity to St. Louis, Riverlands is a favorite among local birders and nature enthusiasts. The Environmental Demonstration Area has been cited on many occasions as the best location in the St. Louis Area to go for birding. Varying landscapes provide habitats to suit species from nearly all the main groups of water-related birds. Positioned along the Mississippi River Flyway, thousands of migratory birds pass through the Riverlands areas. In January and February, winter raptors, particularly the American Bald Eagle, and migrating waterfowl such as the Trumpeter Swans, draw huge crowds. During spring and fall migrations, another popular sight is the large population of American White Pelicans. Whatever the season, Riverlands offers ample opportunities for viewing wildlife.

More Smew News

By Keith McMullen

Wildlife Biologist, Regulatory Branch,
and Vice-President, Illinois Ornithological Society

The Smew nests in cavities most similar to the common North American specie, Hooded merganser. Its diet includes mainly fish and crustaceans it captures by diving under the water.

The Smew is a rare visitor to North America, however, it sometimes shows up in Alaska off the Aleutians and the Pribilofs. It is also a rare visitor to the west coast, with records in California, Oregon and Washington, as well as the east coast, New York and Rhode Island. It is thought to be most rare in the interior U.S. with a 2000 sighting in Wisconsin and a sighting recorded in Minnesota in the late 1990's.

The current Smew at REDA in Missouri, is thought to be a valid record and not an escapee from a zoo or private collection based on several factors. The bird appeared in good health, actively feeding and with no noticeable feather wear. Also, no leg bands, common on birds from captive stock, were noticed. Lastly, the

bird's close association with other diving ducks in the area enhance speculation that this bird, as well as the other divers, arrived after the latest warmup and weather passage, which allowed for open water foraging as opposed to an area that had been solid ice.

The weekend of 20 January, on Saturday and Sunday, the Smew flew out into the main channel, definitely crossing over into Illinois waters. I was among the many lucky birders provided the rare opportunity to witness a two-state occurrence.

I was thrilled.

Photo courtesy of
Christopher L. Wood



THE (dare we say "our") Smew that was sighted by thousands at Riverlands

St. Louis District Supports Kosovo Operations

By Major Ben Bigelow



Transfer of Authority from CPT Bigelow to CPT Johnson - 21 Sept 00

I spent about six months in Camp Bondsteel, Kosovo working with the USACE construction management team for Task Force Falcon. My job was to act as the link between the

USACE engineering team, the sustainment contractor and the task force (military) staff. Needless to say, this was a daily challenge and kept me busy my entire six months in country. The Balkan Sustainment Contract is a cost-reimbursable award-fee service contract to allow maximum flexibility for the military leaders in the construction and maintenance of the basecamps. However, it requires significant oversight to assure a quality product is produced in a cost-effective manner.



Completion of Camp Bondsteel parade field... Picture of BCCA team (unofficial dedication)

A team of USACE military and civilian personnel provides contract oversight for the USACE contract. I had twelve USACE

personnel working with me including civil, electrical, mechanical and environmental engineers as well as construction representatives. Our team supervised the construction of two basecamps, housing almost 8,000 American and multi-national soldiers. We built living quarters, gyms, theaters, and dining facilities as well as small outposts to house soldiers patrolling in the

towns. The team worked 12-14 hour workdays seven days a week. The civilian USACE employees wore the same battle dress uniforms (BDU) as the American soldiers and often traveled to construction sites out in the countryside with an armed military escort due to the continued threat in the region. The commitment and motivation shown by the civilian personnel to the difficult task made me proud to be part of the USACE team.

When I arrived in country, I had only a little knowledge of why peacekeeping forces were needed there. Kosovo is a province of Serbia. It is not a separate country. The two major ethnic groups in Kosovo, the Serbs and Albanians, have never been on good terms and the breakup of Yugoslavia magnified ethnic problems that had been brewing under the surface for centuries. The end of Tito's communist dictatorship and the fracturing of the Balkans ultimately led to the "ethnic cleansing" reported and viewed in the international media.

The agreement signed by the Yugoslav government in June 1999 allowed NATO forces to enter into Kosovo to stabilize the situation and protect the people. Kosovo has been divided into four sectors to aid in control of the ethnic violence from both parties. Each sector has multi-national peacekeeping forces led by a different country. Both ethnic groups still hesitate to trust each other and working to create a stable environment will be a long term task. US and multi-national forces patrol the streets of towns in Kosovo both night and day, enforcing a fragile peace.

Most people think of Kosovo as a war-torn land. Instead, it reminded me of what any area, even St. Luis, would look like if there had been no metropolitan government for over 10 years. Think about the functions that we take for granted here in the United States such as the police, the post office and the garbage Removal. These functions simply do not exist

A Walk Through History

By Terrie Hatfield

Anyone who has recently walked the hallway between the fourth floor lobby and the Commander's office has already deepened his or her knowledge of the history of the St. Louis District, the Corps, the city of St.



Terry Norris proudly watches other District Team Members admire his efforts

Louis, and American history in general. Dr. Terry Norris, Senior Archaeologist and expert on the history of the Middle Mississippi Valley, was tasked to create a permanent hallway display depicting the history of the St. Louis District.

Terry first begged, borrowed and collected any and all historical photos, documents, and interesting bits of history from Corps employees who, eager to contribute, diligently dug through old files, seizing the opportunity to rid file cabinets of all that accumulated stuff that's "too good to throw away," which "someone might need." Terry then embarked upon the gargantuan task of sorting through the material, and picking "old Corps brains" for their institutional knowledge. Terry and some long time Corps employees then selected the most pertinent, the most interesting,

and the most verifiable of items for the display. Additional material was also obtained from the Missouri Historical Society and the River Museum.

A team of District archaeologists, Laura Kruchow, Kristen Marino, Eugene Marino, and Dr. Marc Kodack, and IM magician, Russ Elliott assisted in materials review and selection, display design and layout, and preparation of contractor cost estimates.

Officially titled "Historical Images of the St. Louis District," the walk through history actually begins in prehistory, with the first documented evidence of humankind in the District's geographic area--engravings of a prehistoric wooden canoe recovered from a Mississippian period site contemporary with the St. Louis Mound Group. We go on to the perfectly preserved bald cypress canoe, recently discovered buried deep in a Mississippi River side channel, determined to be approximately 400 years old, similar to those occupied by Native American warriors reportedly seen by Hernando Desoto's 16th century expedition. We discover that the rapid growth of St. Louis corresponded with the destruction of the prehistoric "Big Mound," destroyed in 1869, the largest and last of the 27 Mississippian burial mounds from which the city's nickname, "Mound City" was derived.

As we move along, we are drawn into the history, and the story, rich in culture and adventure. The observant cannot help but become more in touch with our river heritage as we are taken back to 1763, when French businessman Pierre Laclède Liguist, in search of a trading post location, pulled his canoe onto the bank, approximately 300 feet north of where the St. Louis District Service Base now stands. Realizing the import of the river to commerce, Laclède, in 1764, tasked 13-year-old August Chouteau with leading a construction crew to build the village he named St. Louis. Laclède also sent Chouteau's mother to operate a hotel, and to unofficially oversee her son's activities. Madame Chouteau became the matriarch of one of the "first families of St. Louis."

Each step in our travel through time shows us how the river evolved into a major commercial transportation system. In the late 18th and early 19th centuries, keelboats carried immigrants, and flatboats carried cargo. In 1817, the arrival of the "Zebulon Pike," the first steamboat in St. Louis, heralded the beginning of the Golden Age of steamboats on the Upper Mississippi which came in staggering numbers. Between 1845 and 1852, 22,045 steamboats passed through the St. Louis port. Their insatiable hunger for the "endless supply of timber" (75 cords of wood per boat, per day), along with timber requirements for residential and commercial building, decimated the forested riverbanks. This extreme defoliation caused such rapid and

severe erosion that entire banklines slid into the channel. These hazardous obstructions, combined with a buildup of sandbars caused by the shifting current, deteriorated the navigation channel, threatening the future of St. Louis as a river port. Between 1811 and 1851, at least 576 steamboats were lost. The constantly changing location of snags and shoals made the river so treacherous that the average life of a steamboat was 18 months, with a steamboat wreck every mile between St. Louis and the Mississippi's confluence with the Ohio River (200 miles).

In 1824, the Rivers and Harbors Act charged the Corps with the responsibility of improving navigation on the Ohio and Mississippi Rivers. The Corps commissioned Henry Shreve to design and build the snagboat, which reportedly removed more than 75,000 snags from the Mississippi River's shoreline. The channel problem was so severe, however, that St. Louis officials requested additional federal assistance.

In 1837, two military engineers, Lt. Robert E. Lee and 2nd Lt. Montgomery Meigs, were sent to devise a structural solution to the sandbar problem. Meigs mapped the harbor, and Lee planned a system of wooden dikes to redirect the river's energy against the sandbar, which was eventually carried away by the redirected current.

1849 was not a good year for St. Louis. A cholera epidemic swept the city and a steamboat fire spread to 23 other steamboats before destroying nearly 15 blocks of the original city. The present day riverfront cobblestone wharf is a product of the relocation of burned rubble from that fire.

By 1879, channel degradation threatened the viability of commercial navigation. Congress created the Mississippi River Commission, charged with the restoration of the Mississippi River channel, as closely as possible, to a pre-steamboat configuration. The St. Louis District, formally established in 1873, became a focal point of this restoration. Col. James H. Simpson, St. Louis District Engineer from 1873 to 1880, recognized that long term channel improvements could only be achieved by working in harmony with the natural laws of the river—a philosophy still practiced by River Engineers today. He recognized the importance of bankline vegetation relative to the river channel. Improvement was a long, slow process, and attempting to mitigate over 60 years of unregulated modification and damage was a mighty task.

Wall walkers become easily absorbed in the continuing series of pictures and revelations. We are treated to a barrage of little-known and well-known facts, such as:

- During the Civil War, engineer-extraordinaire James B. Eads (as in the bridge) built Monitor-Class Ironclad warships at St. Louis' Union Iron Works.
- The Steamboat Bluff City caught fire at Chester, Illinois in 1897 while carrying a load of horses. The horses were released and swam to an island on the Missouri side, still known today as Horse Island.
- The navigation channel below Ste. Genevieve has moved due to erosion resulting in a 7-mile eastward migration of the riverbed.

We see a photograph of St. Louis residents walking across a frozen Mississippi River circa 1900. We discover that the really big and scary Mississippi River fish stories are true. The photo of a 7 foot-long long Alligator Gar caught in 1937 was impressive enough, but, according to the fisherman, the one that got away was even bigger. Then there was the Alton Shark, yes, Shark. In 1937 (a bad year for swimmers in the Mississippi), a 5 foot-long adult Bull Shark was caught near Alton, Illinois. Scientists claim that this species of shark may live in fresh water for up to six months. A shark was once found in the Amazon River 2000 miles from the river's mouth, so the Alton Shark was not the first to visit an inland river. Old Locks and Dam 26 and Lake Wappapello projects came along just in time to provide much needed work for tens of thousands during the Great Depression.



Laura Kruchow, Eugene Marino, Marc Kodack and Kristen Marino enjoy their participation in the District's historical wall.

Walk Through History (cont'd)

The Rivers and Harbors Act of 1927 authorized the District to permanently maintain a 9' x 300' wide navigation channel between St. Louis and the Ohio River. The wall depicts the St. Louis District's roll in navigation and flood protection and the wars waged on devastating floods in various Missouri towns—the Great Flood of 1927 on the Lower Mississippi, after which the Corps was charged with development of a flood control system which included reservoirs, levees and navigation control pools. There were significant floods in 1943, 44, 47, 1973...the history to be continued on another wall, at another time.

Many District employees don't walk quite so fast down that hall anymore. Thanks to Terry Norris and his team of professionals, we're all a little smarter about our local history, about where a lot of street names came from, and about what makes our District such an integral player in the evolution of our city and of the Mighty Mississippi's key role in commerce. Employees in the field are invited to spend some time at the wall next time you're in the District office and take a stroll through our District's history.

PARTNERING REVITALIZATION

By Ron Viehweg

The St. Louis Metro Area Association of General Contractors (AGC) Chapters consisting of AGC of Missouri, AGC of St. Louis, and Southern Illinois Builders Association met with the St. Louis District Corps of Engineers in a partnering conference in January 2001. The conference was part of an initiative to revitalize the partnering concept between the Corps of Engineers and the construction industry. Both the Corps and the AGC were concerned that partnering was becoming "old hat" and was losing some of its luster and excitement.

In 1990, LTG H. J. Hatch formalized partnering in the Corps of Engineers. The idea was to create an atmosphere and mindset that encouraged dispute resolution through dispute prevention. LTG Hatch stated in his policy memorandum, "By taking the time at the start of a project to identify common goals, common interests, lines of communication, and a commitment to cooperative problem solving, we encourage the will to resolve disputes and achieve project goals." Over the past ten years partnering has been instrumental in the success of numerous projects by establishing an atmosphere of trust and candor in communications leading to a cooperative management team. Through the years it was felt that the newness and excitement of partnering had faded and action was needed to revitalize this important ingredient in project success.

The initiative began at the national level between the Corps of Engineers and AGC at a meeting in Tampa Bay in 1999, followed by a Regional Partnering Conference between the Mississippi Valley

Branch and Mississippi Valley Division of the Corps Of Engineers held at Olive Branch, Mississippi in 2000. The local partnering conference held this past January is a continuation of this revitalization process. The conference was attended by approximately 50 participants and was co-chaired by COL Morrow for the Corps and Mark Schnoebelen for the AGC.



COL Morrow presents the awards to Larry Goodwin and his staff

The conference opened with the ratification and signing of a Partnering Charter that renewed everyone's commitment to partnering both in concept and actively encouraging partnering activities. The bulk of the conference was then dedicated to open and candid discussions of items of mutual concern between the Corps and the construction industry. During the course of the conference, the Corps recognized Goodwin Bros. for the outstanding performance and safety record on their two contracts on the Ste. Genevieve Project.

Management and Labor—A Successful Partnership

By Terrie Hatfield

On 6 December 2000, COL Morrow met with representatives of management and labor for the signing of the new International Brotherhood of Electrical



Kathy Hatfield,
District Labor Relations Officer



(l-r) IBEW Chief Negotiator Bill Tate, COL Morrow, and Dave Berti, Chief Negotiator for the Management Team.

Workers (IBEW) Local 350 contract. The management team was guided and assisted by Kathy Hatfield, District Labor Relations Officer, who spent weeks of preparation, researching historically negotiable and non-negotiable provisions and proposals. This extensive preparation enabled both sides to finish negotiations with a win-win contract for both management and the union. Once completed, this

contract will serve as a basis for others in the future. This contract contains clear-cut articles to assist both management and the union in maintaining an open and healthy communicative environment. Both sides felt the negotiations went well and in fact, extended the duration of the contract for an additional year. After both sides signed the contract, it was approved by COL Morrow, then sent to the Civilian Personnel Management Services for review and signature. This is just one more positive step in management and labor working together as partners. Thanks to both teams for their

time and effort.



(l-r) IBEW Team member John Hickam, Kevin Long, alternate Chief Negotiator, Bill Tate, COL Morrow, Management Team Chief Negotiator Dave Berti, Team Member Dennis Fenske. Absent was Steve Dierker

Andrea Wichlan —January Employee of the Month



Student employee Andrea Wichlan, Hydrologic and Hydraulics Branch, has taken advantage of the opportunity to not only learn on the job, but also, to make a difference. Andrea recently completed putting the BLUE BOOK (Levels and discharges of the Mississippi River and Tributaries in the St. Louis District) onto compact disc, making it much easier to use. The St. Louis District is the FIRST and ONLY district in the Mississippi Valley Division to accomplish this, and future savings will be realized. In addition, the District has had numerous requests from our customers to supply this information in CD format.

Andrea is a self-starter and is very customer oriented. She is an invaluable member of a team whose contributions have helped establish and maintain the reputation of the St. Louis District's Water Control Unit as one of the finest water control offices in the Corps of Engineers. Her dedication, innovation and customer orientation are remarkable and set an example to which all employees, in addition to students, can aspire.

A St. Louis native, Andrea attends St. Louis University, majoring in Business Administration and Management. Upon graduation, she hopes to find a career that provides extreme satisfaction. As a student employee, Andrea describes her co-workers as fun and helpful. She was apprehensive at first, not knowing if she would be accepted because of her young age, but it didn't take long for her to be assigned as much as she could handle. She hopes to be able to bring other new changes to the office. According to Andrea, "We are always trying to improve, so I will be willing to help. Hopefully, our office will continue to go forward in technological advancement." Congratulations, Andrea!

Micro Modeling Wins Honor Award

By Andrea Wichlan

The Chief of Engineers Design and Environmental Awards Program-2000 Honor Award was presented to the St. Louis District for the development and implementation of Micro Modeling technology. District Potamologist Rob Davinroy accepted the award on behalf of the District at the Applied River Engineering Center on 24 January 2001.



(l-r) Ben Clemons, Ed Riiff, COL Morrow, Aron Rhoades, Rob Davinroy, Dave Busse, Mel Baldus, Leonard Hopkins, and Steve Redington. Not pictured, but extensively involved in development and implementation of Micro Modeling, Claude Strauser, Lloyd Coakley, Jerry Rapp, Dave Gordon, Dawn Smith, Avenant Melidor, and Jack Eckles.

Micro Modeling, an extremely small scale, physical sediment transport-modeling tool, allows engineers to replicate the mechanics of an actual river or stream on an area the size of a normal tabletop. In 1997, the Corps of Engineers, St. Louis District developed and introduced this amazing new tool that has challenged and possibly surpassed most, if not all, previously-used applied river engineering techniques and methodology.

The introduction of this new design tool was first met with disbelief and pessimism from some members of the scientific community. Some deemed this technology as simply "too good to be true" due to its low cost and almost immediate results.

The tool has performed beyond all expectations, breaking generational and corporate paradigms. This technology is having tremendous

ramifications on the way present and future river engineering and construction are performed on the world's rivers and streams. Micro Modeling became one of the most revolutionary river engineering tools of the last century, and will continue to be in the forefront of new millennium river engineering technology.

Congratulations to the River Engineering staff for many years of success and a job well done. This award is well deserved.



Dave Gordon (far right), Hydraulic Engineer, demonstrates the use of Micro Modeling technology to visiting Japanese dignitaries.



Claude Strauser uses a Micro Model to teach a young student

"The Micro Models enable one to see and understand the interaction of large reaches of a river, and also gain a keen understanding of how upstream changes can adversely or positively influence downstream conditions several miles away." Butch Atwood, Fisheries Biologist for the Illinois Department of Natural Resources

"With a Micro Model, it's easy for a [river] pilot to understand what can be expected to occur in the future from a river construction project. This tool clearly enables pilots and engineers to come together on the same level of thinking." Paul Revis, Executive Director of the Arkansas Waterways Commission, State of Arkansas

(Kosovo-cont'd from page 5)

in Kosovo. This is the major challenge for the United Nations -- to establish a network of functional government at both the city and "county" level. Overlay this basic daily problem with the animosity existing between the Kosovar Serbs and Kosovar Albanians and it is readily apparent why the situation in Kosovo is a significant commitment to both NATO and the United States.

Although I missed my wife while I was in Kosovo, the six months I spent there provided a very enlightening experience. I think it is good periodically to reflect on the blessings we have here in the United States. The soldiers and civilians working over in the Balkans are our representatives, doing good work for our country in a strife-torn land.



(l-r) Mike Demasi, Naim (our translator) and meon Hill 1688 during a recon of a new outpost

St. Louis District FUSRAP Project Implements TPP with Savings

By Ron Frerker, ED-HQ

The St. Louis District FUSRAP team has been assigned the mission of cleaning up radioactive wastes left over from the Manhattan Engineering District (MED) work in the 1940s. The MED refined uranium ore by a multi-step organic extraction process, in order to produce the pure uranium metal needed for atomic bomb production during WWII. Each of the steps produced a waste stream and this waste contaminated numerous geographic locations in the St. Louis metropolitan area.

As part of the clean-up process, the Corps places wells at various locations around the contaminated areas in order to monitor the effects of the waste on the groundwater and later, after remediation, to check on the efficacy of the clean-up. A Corps team determines the number and placement of these wells.

A geologist is an important member of this team. However, as many of you know, there can never be too many wells for a geologist. A proper density of wells for a geologist is reached when the drill rig cannot reach the new site because of wells in the way. Also involved in the process are the state regulators. There can never be too many samples for a regulator.

And of course, there's never enough money from the project manager. What's a poor chemist to do?

Well, at that point, we dust off our copy of EM 200-1-2, Technical Project Planning Guidance for HTRW Data Quality Design, or TPP. There are certain attributes to this scientific process: it's focused on site close-out, useful for all sites, applicable for all aspects of site planning (investigation, design, construction, O&M and long-term monitoring), and guidance for all team members (scientists, engineers, PM's, regulators and customers). Use of the TPP process typically saves ten to fifteen percent of project time and costs.

Now, there's nothing magic to this process, it's just a formalized application of the scientific method. It has four phases: to identify current project, determine data needs, develop data collection options and finalize data collection program. Phases two and three are parts of an iterative process where the number of iterations depends on the complexity of the project.

The actual process is where the magic comes in. For our application, the EPA and state regulators, scientists with our A/E firm, Corps scientists and a facilitator from the HTRW-CX participated. As we have seen in the past, when this group of scientific peers comes together to follow this outline, we find that some of the "agency baggage" gets left behind, and we focus on the solution to the problem. As a team, we try to identify what are the basic, optimum and excessive sampling objectives.

So, what happened? When the Corps took over the FUSRAP site, the well sampling for the roughly ninety wells was costing approximately two hundred and forty thousand dollars per year. After the final implementation of the TPP program, our well sampling for FY01 will be about one hundred thousand dollars with no loss of needed data.

As hinted at earlier, we've used this process on three occasions on this project. The second application's savings are hard to estimate. However, by getting "buy-in" to use background samples from the fill material that makes up much of the St. Louis waterfront, rather than from nearby residential areas, we were able to get a more

FUSRAP cont'd from previous page

realistic value for the background values of the radioactive contaminants. Common industrial contaminants that were not MED related, could be documented and therefore eliminated. While the process is cumbersome and therefore not easily applicable to some small sampling regimes, its results on the larger sampling programs makes it a valuable tool in our arsenal.

Retirees' Report

January 18th was a very pleasant day for mid January, so some of the retirees ventured out to have lunch and tell some stories. It wasn't a very large group, but they did exchange information about themselves and some of those that were not there.

Lew Scheuermann mentioned that Elmer Huizenga is feeling a lot better. He was told that he was "a quart low", and when that was replenished he became his old self. The Huizengas went to the Kansas City area to visit their daughter and Elmer made the trip in flying colors. Lew also mentioned that the last he heard from Jim Baker was that whatever was causing him some problems left just as mysteriously as it came. He is back to playing golf on a daily basis.

Don Wampler stated that Bob Maxwell is doing great after his knee replacement. He picked a good time of the year, since most of the golf courses are closed for the winter. Maybe Bob will be back to the golf league, since he has corrected his "handicap".

Pete Puricelli was back. He claims that he now has conclusive proof that he has a heart, regardless of what was said about him in the past. His "illness" didn't change him too much. He was surprised to find how many people have had the same operation. While in the hospital, he met Jean Lindhorst whose husband, Bill, was there for an overnight stay. Charlie Denzel said that John Jansen is still motoring along. Considering his age, he is doing remarkably well. John still volunteers at St. Anthony's hospital, but has cut back on his hours. Charlie's daughter made him a grandfather of TWINS, and he and his wife are very happy, since it wasn't the m. Gramps will go to see the twins some time soon, maybe in the next three weeks. CONGRATULATIONS TO BOTH YOU AND JANE.

Mark your calendars for the third Thursday of the month., for the next luncheon at the Salad Bowl at about 11:00am.

controlled by the length of time necessary to obtain newly forged components to replace all damaged parts. The Rock Island Arsenal has placed the fabrication of necessary items to repair the lock on its mission critical list. The new forgings are expected to arrive by 13 March.

Upon closure of the main chamber, District personnel prepared, post-haste, the 600-foot auxiliary lock for use. The auxiliary lock has done a commendable job in keeping up with traffic demands thus far, owing largely to tow size restrictions and off-season river traffic. Considering that the main lock is out of operation for a minimum of 2-3 months, commercial navigation on the Upper Mississippi and Illinois Rivers essentially would have shut down if not for the auxiliary lock.

With this in mind, the existence of the second lock seemingly has been justified.

According to Lynn Muench, Vice President of

MARC 2000, the full economic impact of the second lock will not be realized until after the lock opens and complete figures are available. However, based on historical data, she cited the following as a prime example of economic impact of a lock closure: Tim Burrack, Past President of the Iowa Corn Growers' Association (ICGA), and Board member of the National CGA stated that during a 1999 **scheduled** closure of the Mel Price 1200' lock at Mel Price, all corn bids, for export and domestic, dropped eight cents a bushel overnight. The 400 million bushels in storage or in the Iowa cornfields represented \$32 million dollars worth of crop value and equity lost. This was only one state, one product, but obviously there was a domino effect, both in farmers' income and in cost to the public.



Lakes and Rivers News

Carlyle Lake/Kaskaskia Navigation Project

Celebrate the Earth 2001

Carlyle Lake will host the 4th Annual Celebrate the Earth Event on 27 April 2001 at the Dam West Recreation Area. The purpose of this event is to help students understand, make educated decisions, and appreciate the environment. Approximately 1500 local students ranging from Kindergarten through 8th grade will participate. The students will progress from station to station throughout the day to learn about the environment. The events are geared to the age groups. Our partners in this event are: Illinois Department of Natural Resources, Illinois Natural History Survey, Natural History Education Company, St. Louis Science Center, World Bird Sanctuary, and the St. Louis Herpetology Society.

Carlyle Lake Maintenance Worker Retires

Carlyle Lake Maintenance Worker Al Lovell retired in December 2000. Mr. Lovell served in the Army from January 1976 to October 1978. He started at the Carlyle Lake Project Office in February of 1994 as a seasonal maintenance worker and became full-time in September of 1998. Al resides around the Nashville, IL area is married and has 6 children.

Federal Inmates' Labor Results in Substantial Cost Savings

On 16 March 1998 the Carlyle Lake Project began using federal inmates from the Greenville Bureau of Prisons Work Camp. For the last three years, their labor has resulted in savings to the government of approximately \$600,000. Charles Johnson is responsible for providing logistical and technical support to this very successful program, without which many projects would not have been possible.

Due to overpopulation of women inmates, the Greenville Work Camp was recently changed to accommodate women. The project's Memorandum of Agreement (MOA) with the Federal Bureau of Prisons does not specify gender in using inmate

labor; therefore, we were able to change to using female inmate labor without changing our MOA. 17 January 2001 was the last day male inmates worked at the project. The Carlyle Lake Staff has received training to help with the transition. Female inmates are expected to begin working at the project by 1 April, 2001.

Mariner's Village Resort –The First Resort at Carlyle Lake

The Microtel Inn & Suites opened 18 January 2001 with fifty educators as the first guests. The Microtel Inn, a 65-room complex is the first part of the Mariner's Village Resort to open. It is located across or north of the Carlyle Lake Visitor Center and directly west of the marina and



within walking distance of Dam West Beach. The resort will also include the Dockside Dinner Restaurant offering breakfast, lunch, and dinner. Banquet catering service is expected to begin in April. The resort will also have five cabins, a swimming pool, and a five-acre lake.

Mark Twain Lake

CHART Teen Task Force

On 3 February 2001, Park Ranger Chris Coe participated in the fifth CHART Teen Task Force Teen Health Fair held at the Admiral Coontz Recreation Center located in Hannibal, MO. Ranger Coe presented water safety programs to over 600 teenage students.

Mark Twain Lake Chamber Partnership

The Staff at Mark Twain Lake joined with the Mark Twain Lake Chamber of Commerce to promote the lake project at the Central Illinois Gone Fishing Outdoor Expo on 19-21 Jan in Peoria, Illinois. While at the show, Park Ranger Chris Coe presented water safety programs to 250 children. Lake staff made contact with approximately 3500 individuals at their booth.

Wappapello Lake

Staff members from Wappapello Lake attended career days during the month of February for a variety of age groups from 5th and 6th grade students to college students. The trend will continue this month as several more career day events will be attended by Wappapello Lake staff to promote the Corps of Engineers' diverse work force as a potential career choice.



Several of Wappapello Lake's facilities, including campgrounds, comfort stations and picnic areas, will be opening this month as preparations are made for the upcoming recreation season. Staff members have been working diligently in preparing areas to help visitors enjoy their stay.

Wappapello Lake staff is developing a Challenge Cost Share Agreement with Three Rivers Health Care to provide medical assistance at Wappapello Lake. The agreement, which Park Ranger Diane Stratton hopes to have signed this month, will result in having a trained medical person, such as an EMT or Paramedic, riding in the Ranger boat as the Rangers patrol the waters of Wappapello Lake on busy weekends during the recreation season.

The Natural Resources Program at Wappapello Lake welcomes the addition of two students, Chris Alley and John Fowler, both from Southeast

Missouri State University, to the STEP program.



Rend Lake

Technology to Benefit Wildlife and Students at Rend Lake

By Ray Zoanetti

As introduced in last month's Esprit, the Sesser-Valier High School Biology II class, taught by biology teacher and temporary Rend Lake Park Ranger Gene Morgan, recently received a "Literacy in Technology" grant to study the movement of the whitetail deer on public lands surrounding Rend Lake. The purpose of this grant is to expose high school students to the use of modern technology in the study of scientific problems. The students will place radio transmitters on the necks of two does in the North Sandusky Recreation Area. The does will be tracked by receivers in the field and via a satellite uplink from within the classroom. The students will be able to download the GPS (Global Positioning System) data onto computers at the school and use GIS (Geographical Information System) software to analyze the data. Mapping of the vegetation types in the recreation area will provide the students and Corps Natural Resource personnel a clearer picture of the types of habitat used by the whitetail deer species.

Several agencies are assisting with the research project, and in turn, will be provided with valuable information from the study. Professors and graduate students from SIU's wildlife laboratory will mentor the high school students in the methods of capturing the animals to be radio collared and the use of computer hardware and software to be used in the project. The college students will also be involved in assisting the students with the mapping of the vegetation zones in the recreation area and analysis of the data. Netting equipment is being loaned to the group by the Illinois Department of Natural Resources and the Corps of Engineers at Rend Lake is assisting the group by providing aerial photographs and access to the study area.

The program is a definite win-win situation for both the biology students and the Corps. The Corps gets valuable data to help them in managing wildlife resources, and the biology students get a leg up on the use of technology in science and a

look at a possible career choice. Interested persons can keep abreast of the progress of the study by accessing the research web site at <http://www.cehs.siu.edu/sv/>.



Illinois Department of Natural Resources wildlife biologist retrieves a capture net after demonstrating to Sesser-Valier High School Biology II students how the

deer to be used in the study will be caught.



Students from Sesser-Valier take lessons on cannon netting from IDNR wildlife biologist.

Rend Lake Bike Trail Phase II update

PEII work has begun on an eight-mile section of the Rend Lake Bike Trail. Hanson Engineering from St. Louis, MO, is completing the work. Park Ranger Jim Ford is working on the concept plans for a map, brochure, and final design of the new Rend Lake Bike Trail Logo.

The nearby city of Benton, IL was recently awarded \$40,000 for land acquisition and plans/specs for the Benton spur of the bike trail. The Benton spur will meet up with the Rend Lake trail approximately 2 miles north of Benton. This spur will assist cyclists, from Benton, to access the Rend Lake trail and vice versa. Senator Ned Mitchell who resides in the nearby town of Sesser, IL presented the money to the city of Benton.

Christmas Bird Count held at Rend Lake

On a cold and icy Saturday, 23 December 2000, Keith McMullen, CO-F and Ray Zoanetti, CO-B, along with five volunteers, censused bird populations at Rend Lake as part of the 101st Christmas Bird Count. Over 1700 counts are conducted each year at Christmas-time in North America, Latin America, Hawaii and the

Caribbean.

Rend Lake produced a total of 89 species of birds this year (down from 96 species in 1998). Among the highlights of the count were: a loggerhead shrike, 33 white-fronted geese, one Ross's goose, 9 bald eagles, a glaucous gull and a pine warbler. A snowy owl and four long-tailed ducks (formerly known as the Old Squaw duck) were also seen, but not on count day.

This information is significant to scientists and resource managers for assessing nationwide trends and has relevance to natural resource management at Corps lakes.

Welcome New Employees

Ken Dalrymple, Wildlife Biologist in the Environmental and Economic Analysis Branch



is no stranger to the Corps. Many Corps employees have worked extensively with Ken on a number of environmental projects, when he was employed as a Wildlife Management Biologist for the Missouri Department of

Conservation. We welcome Ken, and his wealth of knowledge to the St. Louis District team.

The St. Louis District welcomes **Gayla Pacheco**, to the District's EEO Office. Gayla



previously worked as an EEO Specialist at the Rock Island District and lived in Galesburg, IL. Gayla received her BA from Western IL University and a Master of Science Degree in Education from Drake University. District

managers and employees alike are looking forward to working with Gayla.



March 2001

Sun	Mbn	Tue	Wed	Thu	Fri	Sat
 US Army Corps of Engineers®	Don't forget to set your clocks back and change the batteries in your smoke detectors.			1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17 St. Patrick's Day
18	19	20	21	22	23	24
25	26	27	28	29	30	31