

ST. LOUIS ARMY ENGINEER DISTRICT

ESPRIT

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GATEWAY TO EXCELLENCE

February 1997

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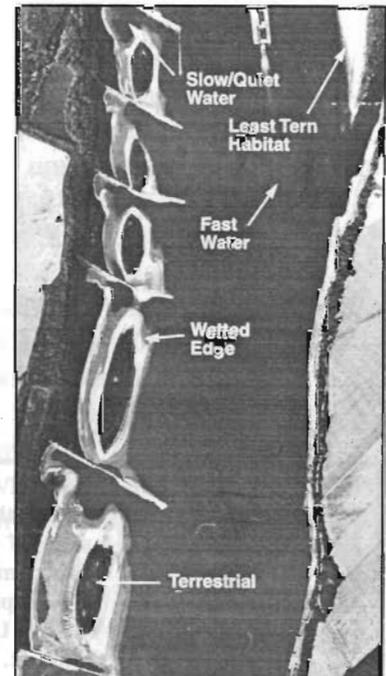
Engineering innovation in the St. Louis District

Potamology Section NEXRAD

NEXRAD (Next Generation Radar) is a national weather radar system operated mainly by the National Weather Service in conjunction with the FAA, DoD and Corps of Engineers. The system provides for collection, dissemination, application and display of weather radar products. St. Louis District is the NEXRAD national archive for the entire Corps. Jule Bartels is Chairman of the Corps-wide NEXRAD implementation task force and the Corps representative on Interface Control Working Group, a multi-agency coordinating group for NEXRAD hardware/software interfaces.

The St. Louis District has taken the lead in developing and applying weather radar products to Corps of Engineer river forecast and project regulations. NEXRAD is the most advanced terrain based method of collecting rainfall amounts and distribution in real time. NEXRAD is a computer system developed for SLD which incorporates this radar imagery, fuses it with rainfall and river stages collected on the ground and inputs the data into mathematical watershed forecast models to provide river flood forecasts and user visualization products. This system was used during the '93, '95 and '96 floods to assist in project regulation and "flood fight" activities. While data collection and management are automated, this package focuses on providing humans in the loop with useful real time information to help make practical decisions during flood periods.

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Environmentally designed dike field in the St. Louis District.



Commander's Perspective



COL Thomas J. Hodgini

Last month I spoke to you about my priorities for this year. I summed them up as "caring for our team, promoting our work and planning for our future." I'd like to expand on the first of these now.

"Caring for our team." To me, "caring for" implies responsibility to look out for the best welfare of employees in the organization. It is also about executing our duties and mission to standard. I'll discuss the former today. Best welfare conjures up different meanings to all of us. Some may see this as improvements such as promotions, more work (or less work), more benefits, or improved working environment. These and similar actions are important, tangible and quantifiably achievable. Managers do this. Another aspect of welfare is our sense of self esteem as valued and respected members of the St. Louis District. This is a leadership responsibility. There are several ways to create an environment rich for growing self esteem. I'll mention three that I think apply. First is trust. Many of you have implied that this is one area warranting improvement. Our District leaders join me in a commitment to strengthen trust. For example, I just signed a memo empowering you to lead and act at the lowest level whenever possible. Second, I want to emphasize what I term the "human dimension." All will be treated fairly, honestly and have access to open communication. Finally, we must celebrate and build upon our reputation as a respected and proactive organization with high ethical standards. Our individual and institutional character sets us apart from other private and public organizations. I'm extremely proud to be a member of this district. Your pride is contagious. Carry it with you wherever you go.

"Caring for our team." Teams are comprised of two or more people engaged together to reach common goals. Team members complement each other's strengths and compensate for each other's weaknesses. Our team is already formidable. How can we improve? I'll suggest three areas. First, we can build better diversity within the team. Improved representation will strengthen our character and foster greater innovation and creativity. Second, we can develop stronger cohesion. Unity within all our various teams (projects, divisions, ad hoc groups, committees, etc.) and the entire District fosters growth, strength, and thus, healthier programs. Finally, the District has experienced much turbulence during these past few years. None can guarantee we will not have another flood or other conditions creating turmoil. The District leadership is committed to minimizing the impacts of turbulence and creating a stable environment.

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US Army Corps of Engineers
St. Louis District

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News Briefs

Carlyle Lake:

Pheasant hunt at Hazlet

Eldon Hazlet State Park on Carlyle Lake sponsored its 24th annual controlled pheasant season from November 6 to December 15, 1996. Nearly 8,000 pheasants were released into a 2,000 acre area specified for the program. A minimum of 246 birds were released each day of the season. The birds were obtained through the Mt. Vernon Game Farm.

A wooded area in which the hunt took place is less than ideal, in some opinions. Pheasants prefer grasslands. However, the Hazlet staff has made attempts to plant proper habi-

tats and have trimmed lower branches from trees.

A total of 3,700 hunters tried their luck. Hunters were allowed a maximum of two birds each. These hunters harvested 5,613 birds. In this controlled hunt, both males and females were fair game. When not on controlled hunting properties, hens are a protected species.

The program was established to allow people without access to private lands a chance to hunt pheasants. In addition, some birds escape hunters and predators, thereby increasing the number of birds in the park all year long.



A hunter walks through the field with his gun, his dogs and the game he's bagged.

Computer model to assist in lake deviations

Included in the recent Economic Study for Carlyle Lake was a computer model of both upstream and downstream information. The working model will allow the Hydrologic and Hydraulics Branch to make more informed decisions by the evaluation and the display of possible impacts if a deviation is needed from the approved Water Control Plan to better accommodate residents.

The Economic Study was presented on December 10, 1996, by John Perulfi of the Economics Branch of Planning Division. Dave Busse from Water Control assisted and answered many questions. Among those in attendance for the meeting were Patti Henry from Congressman Richard Durbin's office and representatives from both upstream and downstream interest groups including the Okaw River Coalition, Carlyle Lake Association, Mid-Kaskaskia Association, the City of Carlyle, local businesses and newspapers.

The meeting opened communication between up and downstream interests which are both very important to the area and the local economy.



Innovation (continued)

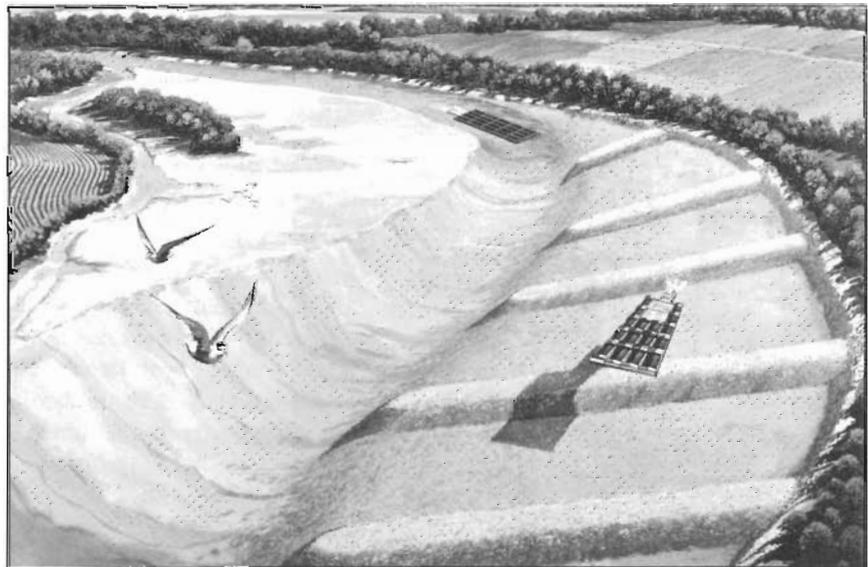
Environmental River Engineering

The SLD Environmental River Engineering Program recently won the Federal Design Achievement Award - an example of how engineering methods and navigation improvement can work hand-in-hand with improving the environment by creating habitat diversity along the river. The result is a system of river structures that meet environmental, navigation and economic goals. Our Environmental River Engineering Program has been received favorably by environmentalists and is used as a model in other Corps Districts.

The District has developed and applied of a new technology called micro-modeling. A micro model is an extremely small, table-top size physical model of a river or stream made to behave like the traditional larger physical models used historically at the Waterways Experiment Station. Because of the small scale, engineers can perform sedimentation studies in months rather than years at a fraction of the cost of the huge traditional models. The micro model can be used in what we consider applied engineering to answer complex river engineering problems on streams of any size.

Environmental Pool Management has been developed by the St. Louis District over the past few years to address a primary concern of biologists relative to the management of navigation pools to maintain and increase overall health of the ecosystem. The water control

managers in conjunction with biologists have developed an environmentally sensitive navigation pool level management plan for our District navigation projects that is unique among Corps Districts. The program has been very successful, resulting in increased vegetative growth, providing food and cover for all forms of wildlife in the pools. This plan has been carried out with no additional cost to our water control management efforts and is being conducted in conjunction with the Upper Mississippi River Conservation Committee. It is recognized as an example of how the environmental and navigation communities can share the river in a mutually beneficial manner.



The District's bendway weir design is one of the most important and innovative river engineering concepts ever conceived.

Engineering Division and Construction-Operations Readiness Division

Environmental River Management is a partnership between river engineers, hydro-

logic mapping and the dredge project manager. State-of-the-art technology is used in the determination of dredge sites, the placement of dredge material and the continuous evaluation of dredge activities to determine the efficiency of dredge strategy.

Geodesy, Cartography and Photogrammetry Section

The District is a Technical Center of Expertise (TCX) for photogrammetric mapping. The TCX provides quick response and high quality mapping services for customers within and outside the Corps. Working agreements are in place for 12 federal agencies and 10 Corps districts. Examples of services performed are: airborne GPS controlled photogramme-

try, GIS development, digital orthophotography, topographic mapping, remote sensing and historical searches.

SLD has two state-of-the-art hydrographic survey vessels operating on the Mississippi



River using multi-beam technology and GPS positioning. This capability allows collection, for the first time, of enough data on the condition of the river bed to allow river engineers to see exactly what is happening to the structures they have designed and placed in the river. SLD operates one of the boats as an LMVD-wide resource. Whenever another district in LMVD needs this type of hydrographic surveying capability, SLD provides it. SLD was one of the first to use such survey craft and now has a capability well beyond any other inland district.

Environmental Quality Section

This section operates state-of-the-art hydroacoustic equipment to determine fish populations at river engineering structures (dikes, bendway weirs, etc.) and dredge disposal sites. Digitized equipment allows for rapid data interpretation saving months as compared to normal methods of collection and evaluation of such data. No other district or Corps office presently has this equipment.

Remote sensing equipment at District projects provides real time water quality data to be integrated with water control management data to assist in overall water control decisions. Water quality conditions at our projects are a concern, especially during low flow, flood situations and during hydro-power generation. This section works closely with water control personnel to protect the public health, safety and eco-

nomics concerns. This section worked with Hydrolab to develop real time water quality instrumentation. SLD was first in the Corps to link project water quality sensors with the satellite water control data collection system.

Hydrologic Engineering Section

This section was the first to adapt a UNET Hydrologic mathematical model to a specific area to forecast and conduct studies on the Mississippi River within the District. This section also serves as the technical advisor to other Districts in adapting the model to their areas.

The Trumpeters have arrived

by Julie Ziino, Rivers Project

The great white Trumpeter Swan, the largest of North American waterfowl, has returned for the fifth consecutive year to the Riverlands West Alton Environmental Demonstration Area to winter. First spotted in 1992, four Trumpeters from the Wisconsin Trumpeter Swan Recovery Program migrated to the area and settled for months. Each year more swans have found their way to Riverlands.

When European settlers arrived in this country, the Trumpeter ranged over much of North America. Except in isolated areas, however, the species was eliminated by hunting for meat and plumage. Swan skins provided down for powder puffs, quills for writing pens and plumage to decorate ladies hats. The Trumpeter Swan disappeared from Minnesota in the 1880s. By 1933, only 66 Trumpeter Swans were known to exist, in the remote Tristate Region of northwestern Wyoming, east-central Idaho and southwestern Montana. It appeared the species was headed for extinction.

Since the enactment of the Migratory Bird Treaty Act of 1918, federal ban on hunting Trumpeter Swans, their populations grew to 673 by the late 1950s. Today, the Wisconsin Department of Natural Resources and many other northern states have recovery programs to bring the Trumpeters back to their original range.

The Trumpeter Swans are marked with numbered neck collars and an aluminum leg band to provide wildlife managers valuable data on their movement and survival. Four Trumpeters have recently settled into Riverlands. A male, 71 KU, which came to Riverlands for the first time as an immature swan back in 1992, has brought his mate and two young (cygnets) with him. Visitors can usually spot the swans on Ellis Bay and Teal Pond within the Environmental Demonstration Area. Last year, 26 swans made their way to Riverlands. So far this year only four swans have been spotted, but, just like the bald eagles, as temperatures drop, more birds begin showing up.

(Continued on page 8)



A river of ice

Price Locks and Dam. The lockmasters at all of the projects make ice runs every day during heavy ice periods to look at the river and see what the ice is doing. They look for where the ice

must be done from a johnboat in the lock chamber to keep the river open. Last year at Mel Price, maintenance and lock staff were put on two shifts working 24 hours a day in severe temperatures to keep the facility ice free and open for navigation. Ice causes major stress on all operating machinery on the locks and dams.

When the time and conditions are right, tainter gates on the dams are opened to suck ice through. "It's like pulling a plug on a bathtub," according to Miller. Ice is allowed to run through the locks and dams until the pool above the dams are ice free. This can take as little as a few hours or as much as a few weeks. The whole time, navigation continues on the river. "Tremendous sheets of ice being sucked through the dam is a powerful event to witness," according to Miller.

Lock personnel work closely with the navigation industry during severe ice on the river. Powerful towboats are used to break up ice fields, some as large as football fields, to keep the ice broken up in front of the dams. Many times towboats

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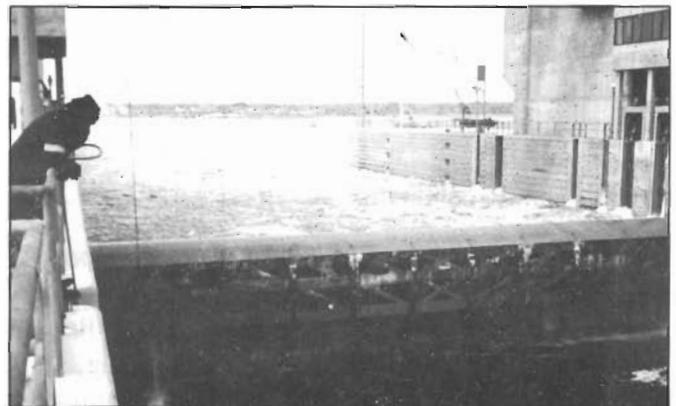
Towboats work to rescue barges, torn from their moorings by ice, caught in ice pack above old Locks and Dam 26 at Alton, Illinois.

by Julie Ziino, Rivers Project
As arctic temperatures move through the Midwest the Mississippi River begins to freeze over. It amazes me that this powerful river can become a river of ice in a matter of days. North of St. Louis District, locks and dams close for the winter because of ice conditions. The five locks and dams in the St. Louis District stick it out and keep operations running throughout the winter months. How do they do it? Let the people who have the coldest jobs in the Corps explain.

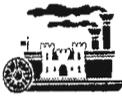
"You have to look at the color of the ice. If it's blue, it's good ice, very hard. If it's black, it's rotten," according to Lockmaster Tom Miller, Melvin

is coming from, whether or not it is moving, or more importantly, if it has stopped and is forming ice jams.

Ice on the rivers interferes with daily operations at all of the locks and dams. During severe weather conditions, ice begins to form on the lock walls and the miter gates. Maintenance and lock staff use jackhammers in sub-zero temperatures to break the ice off the locks. If conditions are bad enough, this



Ice above lift gate at Melvin Price Locks and Dam.



Human Resources



Did you know ?

Thrift Savings Plan loan program changes

On September 30, 1996, President Clinton signed PL 104-208 which makes a number of significant changes to the Thrift Savings Plan. Among them is the loan program, which has been changed to remove the restrictions on the purposes for which participants can borrow from their accounts.

Effective immediately, two types of TSP loans are available - general purpose loans which must be repaid during a period of one to four years, and residential loans for the purchase of a primary residence, which have a repayment period of one to 15 years. General loans do not require that supporting documentation be submitted, but it is still required for residential loans. The Loan Application Form (TSP-20) and the Loan Booklet are being revised. Until the new form is available, participants should use the current Form TSP-20 to apply for any loan. Do not specify the type of loan unless it is for a residential loan.

Form TSP-20 is available at the Human Resources Office.

Lost your PIN?

You can't access your Thrift Savings account information or request an interfund transfer on the ThriftLine without a personal identification number

(PIN). If you do not know your personal identification number, you may request a new one using the ThriftLine. Select Account Activity from the Main Menu and enter your Social Security number. When the ThriftLine asks you for your PIN, press "1" to request a new one. You can access your account when you get your new PIN in the mail.

If you wish to change the PIN to a new number of your choice, select Account Activity from the Main Menu using the ThriftLine. Follow the instructions to enter your Social Security number and your current PIN; then select PIN Change from the Account Activity menu. Enter your new PIN and confirm it by entering it again. You can use your new PIN immediately.

The ThriftLine number is (504) 255-8777.

Levins becomes special assistant



The Honorable Jean C. Hamilton, Chief United States District Judge, Eastern District of Missouri, swore in Bill Levins, St. Louis District, Office of Counsel, as special assistant to the U.S. Attorney on Friday, January 31, in a ceremony at the Federal Courts building, Tucker and Market. Bill was given the added authority in order to process special regulatory environmental cases



Trumpeters (cont.) Robertson on Who's Who list

The Sixteenth Annual Trumpeter Swan Conference, hosted by the Trumpeter Swan Society, was held in St. Louis February 3-6. The Rivers Project Office presented a paper at the conference and also hosted a field trip to the Environmental Demonstration Area for conference attendees.

The threat of decreasing wetland habitat quantity and quality could affect the long-term growth and stability of the Trumpeter Swan populations. Public involvement and understanding of wetland values is crucial to the long-term success of the Trumpeter Swan restoration program. Visitors flock to the Riverlands area during the winter months to see the majestic bald eagle. Today they can also see the Trumpeter Swans and spend some time with the interpretive rangers discussing their habitat and characteristics. By educating the public on natural resources we can instill a sense of proprietorship towards public lands and waters in order to preserve the natural resources we manage.

Saving the whales

In a seven-hour effort, dozens of swimmers, surfers and lifeguards joined rescue workers from two marine parks to save a baby humpback whale and its mother off Coolum Beach in Australia. The whales had been trapped in a net used to protect swimmers from sharks, then pushed to shore by strong currents. Environmental groups protest that such nets are a danger to sea animals.



Recently (Nov. 8, 1996), Wendy Robertson, "Stay-in-School" employee in the Project Management Branch, was honored at the Glen Echo Country Club in North St. Louis County

with the Who's Who in American Colleges and Universities Award. The award is given to students based on their academic achievements, leadership and community involvement.

Wendy is enrolled in the University of Missouri-St. Louis's Joint Engineering Program with Washington University and has a dual major in civil engineering and sociology with a minor in environmental engineering.

Wendy lives with her parents in Northwoods (North County). She has about a year and a half more of undergraduate classes, but plans eventually to get her Masters Degree. Wendy will soon be moving to Structures in the Engineering Division to further her experience with the Corps of Engineers.

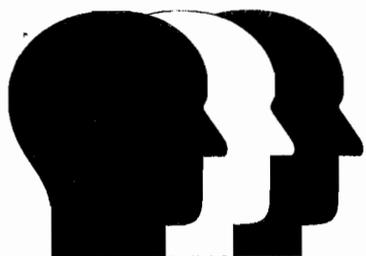
McGinnis on 2004 Team

Pat McGinnis, Assistant Manager of the Rivers Project Office, will become part of the St. Louis 2004 Environment Action Team and its Task Force on the Regional Environment. Pat joins Dr. Peter Raven, Director of the Missouri Botanical Garden, Mike Pierle, Vice President of Environment, Safety and Health for Monsanto Corporation and Ann Mack, Co-Director of the Missouri Energy Resources Project, as part of the team.

St. Louis 2004 is a comprehensive citizen-based effort to make the St. Louis Region a recognized leader in the 21st cen-

tury by accomplishing major capital improvements based on a shared vision that accurately reflects the needs and interests of the entire St. Louis Region. The effort will culminate in a year-long celebration in 2004 that showcases the achievements of the St. Louis Region to the rest of the country and the world.

St. Louis 2004 is supported by a not-for-profit organization that shares its name. The overall effort is being chaired by former U.S. Senator John C. Danforth.



EEO matters

By Jean Stephens, EEO Officer

Black heritage

Because of a Eurocentric perspective on the world history of science and technology, the belief has persisted for centuries that Africans lacked scientific and technological sophistication. In addition, many believed that the Middle Passage and subsequent brutal assimilation into a

Euro-American culture erased whatever cultural heritage Africans had possessed. Recent research has shown that Africans were creative and inventive problem-solvers in science, medicine, metallurgy, and agriculture prior to European contact. When Africans arrived in the New World, they used their technical knowledge of agriculture, boat building, fishing, iron production, medicine and textile production to solve many of the problems facing America. Slave and free African Americans were often highly skilled and recruited specifically because of those skills. The resultant American culture was less a "white man's culture," and more a multi cultural product of African American, Native American, and European American innovation.

Here are just a few of the African Americans who's highly specialized contributions were

introduced, adopted and enhanced the living standards of the United States.

On March 3, 1821, **Thomas Jennings** became the first African American to receive a patent. As the owner of a New York dry, cleaning business, Jennings invented and patented a new process for cleaning clothing.

The term "the Real McCoy" comes from the automatic engine lubricator that **Elijah McCoy** (1843-1929) invented to continuously oil train and ship engines, which was immediately adopted by railroad and shipping lines. Soon afterwards imitations appeared that did not work as well as McCoy's lubricator and that led many would-be purchasers to inquire, "Is this the real McCoy?"

Eventually the phrase was coined as a way to ask whether an item was genuine and of the highest quality.

Garrett Augustus Margan (1877-1963) devised a protective hood and smoke protector (the Gas Mask) in 1912 that enabled fire fighters and other personnel to enter smoky or toxic environments without breathing contaminated air. Garret patented his invention in 1914.

Shelby J. Davidson (1869-1931) developed his invention, the adding machine, out of his efforts to make work in the U.S. Postal Service More efficient. After an intensive study

of applied mechanics, Davidson first sketched, then modeled in cardboard a working version of his invention.

The portable X-ray machine, a refrigerator for military field kitchens, and mechanical refrigeration techniques applied to railroad cars and trucks were invented by **Frederick McKinley Jones**. Jones also developed devices that produced special atmospheric conditions to prevent fruit from drying out or becoming overripe before reaching supermarkets.

George Washington Carver (1865-1943) was an agricultural chemist who won international fame for his research into the uses of peanuts and sweet potatoes. Carver's numerous innovations revolutionized agriculture in the South.

Ralph Gardner was pioneer chemist whose research into plastics led to the development of so-called hard plastics. His innovations in the manipulation of catalytic chemicals led to products for the petrochemical and pharmaceutical industries as well as plastics.

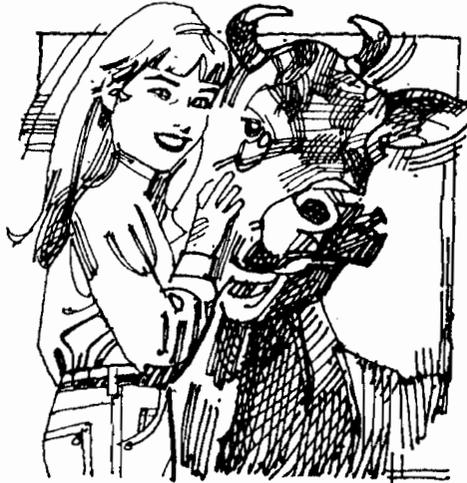
Howard University professor of biology **Ernest E. Just** (1883-1941) was the first to establish, through laboratory experiments, the importance of ectoplasm to the functioning of cells. Just proved that the ectoplasm is just as important as the nucleus to cell function, that ectoplasm regulates the cell's relationship to the external environment, and that without the ectoplasm, cell fertilization is impossible.

George E. Carruthers, born in 1939, was one of two naval
(Continued on page 11)



To your health

How to get stronger bones



Petting a cow won't help, but getting a closer relationship with dairy products will. Calcium is the number one factor for assuring that bones won't break - now or in later life.

The porous bone disease commonly becomes evident in people over age 50, but the stage is set for osteoporosis long before that. Bone mass reaches its peak at age 30, which means young people are involved. The more solid bone mass is at age 30, the more protection you have later. It's like money in the bank.

Can everyone age 30 to 50 forget about their bones? Not by a long shot. These are the years when keeping calcium consumption up saves the bone mass you have. If you weren't much of a milk-drinker in your early years, there is still something you can do now. Exercise.

Weight-bearing exercises, such as jogging, walking and aerobics have been shown to build bone mass, even in the elderly. And exercise has an-

other benefit. Experts at the Center for the Prevention and Treatment of Osteoporosis in New York say good muscles cushion and protect bones, giving an added measure of safety.

Bone thinning is also a condition that concerns men. One in five men will have osteoporosis. It becomes evident later, at age 65, but that's the gate to your golden years. If you want to play and have fun after you retire, better take care of your bones right now. Shoot for 1,000 milligrams of calcium a day, which could mean you have to take a supplement. But do it now or you may not be able to enjoy those golf games after you retire.

It's a more pressing issue for women because they are affected earlier, usually after age 50. The good news is that you don't have to be bent over in a "widow's hump." Whatever your age, there are things you can do now to prevent it.

Young women should be sure they get enough calcium,

the same 1,000 mg. as for men. Women of all ages should get weight-bearing exercise to encourage bone strength. And women past menopause can take estrogen supplements and should increase calcium to 1,500 mg. a day.

Those who are more likely to be affected by bone loss include people with a family history of the condition, post-menopausal women, those taking high doses of cortisone or thyroid hormone, people whose diet is low in calcium, individuals who are physically inactive and smokers.

Bones constantly rebuild themselves, but we have to give them the right material for the job.

Car-window cancer

Sun exposure through your car window year after year can increase the risk of skin cancer. In North America, skin cancer is more prevalent on the left side of the face, the side exposed while driving. In England and Australia, where drivers sit on the opposite side, cancer is more common on the right side of the face, according to Tufts University Diet.

This is another reason for applying sun block as part of your morning bath routine.



Retiree Review

by the Retiree Correspondent

The weather on January 16 was not fit for man or dog, especially retirees. First there were cold winds and even colder windchills. Then there was snow, followed by freezing rain and ice, followed by more snow and more cold temperatures.

Your correspondent was also not available, but from all indications no one else ventured out in the cold to enjoy each other's company at the Salad Bowl. Some were virtually snowed in and couldn't get out even if they wanted to. Others were "under the weather" and didn't want to chance going out and making things worse. This is one of the few times that the retirees didn't as-

semble. Knowing the stamina of these "die hards," it had to be very bad.

Hopefully, February will be kinder and gentler to us. Mark your calendars for the 20th of February at the Salad Bowl at about 11 a.m., and bring a friend.

Condolences

Former Lake Shelbyville park ranger Chuck Kennedy, passed away on Friday, January 10. Chuck worked at Shelbyville during the 1970s. He retired from federal service in 1988.

Black heritage (continued)

research laboratory workers responsible for the placement of the ultraviolet camera/spectrograph on the lunar surface. Carruthers designed the instrument that went up on Apollo 16 in April 1972. He received a NASA Exceptional Scientific Achievement medal for his work.

The influence of Black people in America is rich and varied and always inspiring.

Commander's Perspective (cont.)

In closing, I'd like to mention two programs that will be described in next month's ESPRIT. I'm proud to announce that our Labor Management Partnership Council (LMPC) is formed, chartered and up and running. LMPC union and management members will work together to seek caring solutions to issues affecting the District work force. Also, our brown bag luncheons have been meeting for about five months and have opened up new communication channels. Several have offered comments and recommendations for improvement of District processes. During an earlier luncheon, Barbara Scott captured the essence of what we are trying to do when she said that St. Louis District folks are, "captured by the challenge, kept by the caring."

Gateway to Excellence!

River of ice (continued)

will follow each other through the ice paths that they form, helping each other to make it through.

At Locks 27 and Melvin Price, the vertical lift gates in the upstream end of the locks make ice passage a much easier job than at Locks and Dams 24 and 25. With a vertical lift gate, the water in the lock chamber is lowered, the lower gates opened and then the vertical lift gates are submerged to allow ice to flow over the top of them. This clears the chamber of ice and allows towboats to move through the lock. Without the vertical lift gates at Locks and Dams 24 and 25, lockages that normally take one hour can take up to as much as eight hours because of the amount of ice in the lock chamber.

The locks very rarely closed because of severe ice conditions. The lock and dam personnel are dedicated to keeping navigation flowing no matter what the conditions.

Visitors are encouraged to come to the river during the winter months, not only to see the abundant wildlife, but to experience the elements of the river.

February 17, 1997

Presidents' Day

While President's Day honors all past presidents of the U.S., George Washington and Abraham Lincoln may be the most honored. They helped form and maintain the Union.

Lincoln, born February 12, 1809, was a self-educated lawyer in frontier Illinois during the 1830s and 40s. After serving a term in Congress, he engaged in a series of debates with Stephen A. Douglas, hoping to win Douglas' seat in the U.S. Senate.

Despite his defeat at the polls, the debates made him nationally known, and he was elected to the presidency in 1860. His term was wholly taken up with the war between the states.

Lincoln proclaimed the slaves free in 1863. He was assassinated days after the Union victory in



1865 and became a hero of later generations.

George Washington, born February 22, 1732, came from a family of Virginia planters. At age 16 he began work as a surveyor and in 1749 became the official surveyor of his county. In the French and Indian War, he was named commander of Virginia troops. Later he served in the first and second Continental Congresses.

In 1775, Washington was named commander of colonial forces. By vigorous siege, he

forced the British to give up Boston, and in the ensuing five years he proved himself an indomitable commander.

He was unanimously chosen president of the Constitutional Convention and overwhelmingly elected first president of the republic in 1789.



To my Valentine

Romance aside, Valentine's Day can be a frantic event, but lucrative for greeting card makers, florists and restaurateurs. In 1997 your chances of being taken out to dinner are better than last year's because February 14th falls on Friday.

Historians trace the roots of Valentine's Day back to the fertility festival of Lupercalia in Roman times. With spring in the offing, both birds and humans were beginning to be more affectionate, and celebrating Lupercalia was encouraged to make all unions fruitful.

The love notes started a few hundred years later, prompted by the good St. Valentine, and in centuries to follow, the custom spread throughout Europe and was carried to North America. After Christmas, people buy more Valentines than any other type of greeting card. Some 7.4 billion affec-

tionate and funny cards are expected to be sold for Valentine's Day 1997.

Flowers have long been a symbol of love and caring. They were especially handy a century ago when many lovers were illiterate and could not write a love note or read one.

For most florists, Valentine's Day is the busiest and most hectic day of the year. Many sell thousands of roses, the most preferred Valentine flower. And air freight companies go into high gear as well. Many flowers are grown in South America. Federal Express last year commissioned two extra DC-10s to make its trips for Valentine flowers, and Tampa Air doubles its flights for the time preceding the holiday. (One 747, by the way, can carry 3.6 million roses.)

Candy stores also have a brisk business around February 14, doing about nine percent of their annual business around the big day, says the National Confectioners Association.