



US Army Corps
of Engineers®
St. Paul District

Crosscurrents

Vol. 28, Nos. 5-6

May-June 2005



**Corps volunteers build
Habitat for Humanity homes**

Corps' campsites tops for camping and recreation

By Col. Mike Pfenning
District Commander

For many of us in the Upper Midwest, the Memorial Day



weekend is a time to honor our military – those still serving and those who have gone before us.

This weekend also marks the start of summer and expanded opportunities to get outdoors after an Upper Midwest winter. Many of us will enjoy hiking, fishing, boating, swimming, camping, picnics and going horseback riding with our families during the summer months.

Some of the best camping and

recreational areas for enjoying these activities in the Upper Midwest include the dozen sites managed by the St. Paul District. Annually, the Corps of Engineers hosts more visitors per year at its parks in the United States than any other federal agency. In terms of quality, in 2004, our Sandy Lake Recreation Area in the Mississippi Headwaters was selected as one of the top 100 recreation areas across the entire country by Reserve America, the nation's leading recreation reservation provider. Our diverse recreation sites are spread out from North Dakota in the west to Wisconsin in the east. The only parts of our recreational programs that are more diverse than these sites are our employees who operate them – park rangers, foresters, natural resource specialists and operations managers.

I attended the district natural resource management conference in La Crosse, Wis., last month and was reminded again that our park rangers are the “face of the district,” employees who proudly represent us in daily face-to-face service to our customers. While foresters and natural resource specialists have a relatively focused set of duties and responsibilities, the park rangers are more like the proverbial “Swiss Army Knife.” Park rangers are called to serve as regulatory enforcers, foresters, wildlife biologists, interpretive specialists, volunteer coordinators, GIS specialists and, sometimes, even public affairs officers.

In a typical day, a park ranger might teach a water safety class to a group of students, inspect a shoreline-use permit site for

compliance, issue a citation to a camper for not paying the required fee at a day-use facility, enforce the terms of a contract by meeting with a recreation site cleaning/maintenance, plant trees to restore a riverside area or settle a hostile dispute over a picnic table between two visitors.

Thankfully, we have a capable staff that is well trained in visitor assistance, public speaking, conflict resolution, verbal judo and self-defense – some of which is featured in this edition of *Crosscurrents*. The rangers work long hours on weekends and during holidays to insure that each of the visitors to our Corps' parks has a truly memorable experience.

I challenge each of you to enjoy the outdoors this season by planning a visit to one of our excellent Corps' parks. Like me, I expect you'll find yourself coming back for more.



US Army Corps
of Engineers®
St. Paul District

Crosscurrents

Crosscurrents is an unofficial publication, authorized under the provisions of AR 360-1. It is published monthly for the St. Paul District, U.S. Army Corps of Engineers.

Editorial views and opinions are not necessarily those of the Corps of Engineers, nor of the Department of the Army.

Address all inquiries to:

Editor, *Crosscurrents*
U.S. Army Corps of Engineers
190 Fifth Street East
St. Paul, MN 55101-1638

Phone: 651-290-5202

District Engineer Col. Michael Pfenning
Public Affairs Chief Mark Davidson
Media Specialist Shannon Bauer
Editor Peter Versteegen
E-mail: cenvp-pa@usace.army.mil

Cover photo



Photo by Tom Crump

Mike Dahlquist, engineering and construction (left), and Lisa Hedin, project management, volunteered to assist in construction of a Habitat for Humanity project, April 20. More, Page 5.

Operations trains in visitor assistance, self-defense

By Peter Verstegen

St. Paul District natural resources' branch personnel conducted hands-on self-defense and pepper spray training as part of a conference in La Crosse, Wis., April 26-28. Conference topics included playground safety, visitor assistance, interpretative signs, partnering, programs for the disabled and trends in recreation.

Personnel also visited Pools 7 and 8 on the Mississippi River to view recreation sites and reforestation projects in the Environmental Management Program, or EMP.

"Randy Dye, Kevin Kramer and Richard Stokes, all from the Vicksburg District, gave a presentation on the hunting program for the disabled," said Frank Star, a planner in operations.

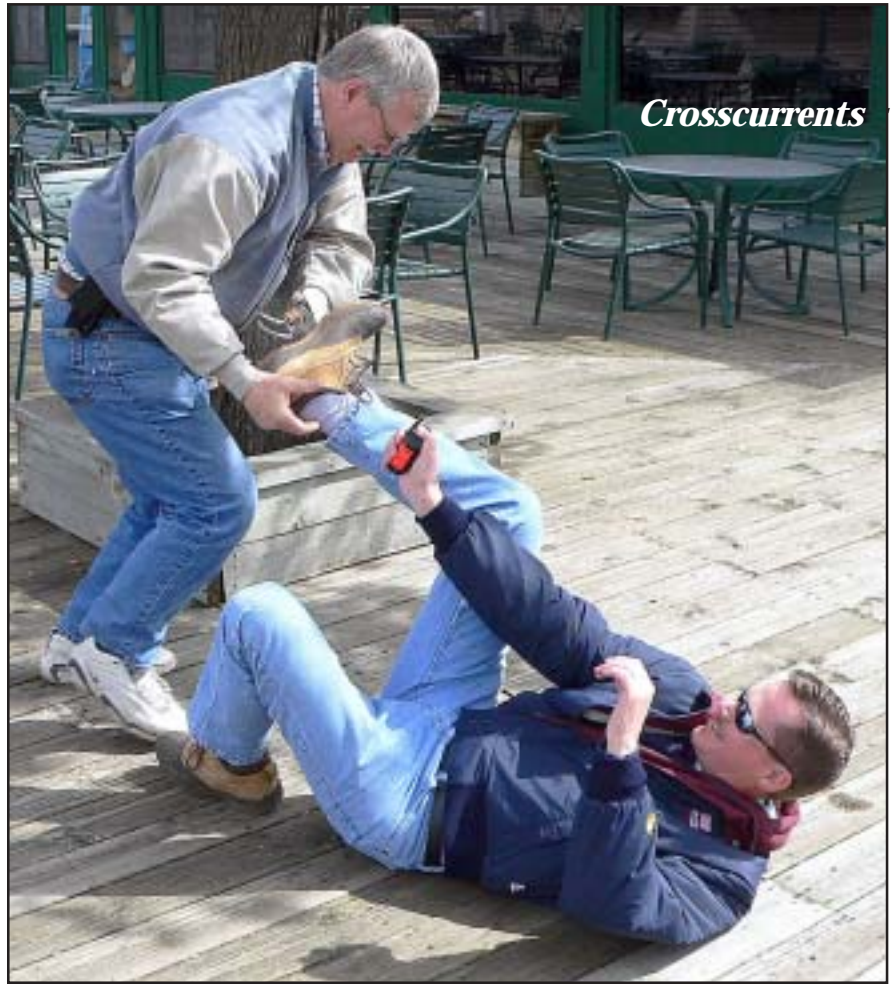


Photo by John O'Leary

Randy Urich (right), natural resources office in LaCrescent, Minn., positions pepper spray against Ray Nelson, from the Crosslake recreation area, Cross Lake, Minn.



Photo by Tammy Wick

Jeff Boutwell, Lake Ashtabula project (right of slide), Valley City, N.D., describes safety standards and guidelines for playground equipment. They were at Blackhawk Park. In photo at right, Dan Cottrell, Blackhawk Park, and Randy Urich, natural resources office in LaCrescent, Minn., practice self-defense techniques.



Photo by Col. Mike Pfenning

District hammers for Habitat for Humanity

By Tom Crump

Eight folks from St. Paul District signed up to help build a four-bedroom house in Minneapolis, sponsored by federal employees for Habitat for Humanity on April 20.

Volunteers reported to work at 8:30 a.m. and worked until approximately 4:30 p.m. Habitat arranged for carpentry tools.

At right are Tom Crump, executive office; Lisa Hedin, project management; Stu Dobberpuhl, engineering and construction; Joe Dvorak, operations; Mike Dahlquist, EC; Seth Nelson and Greg Yale, operations, and Jim Mosner, EC.



St. Paul District photo



Photos by Tom Crump
Seth Nelson, husband to Liz Nelson, engineering and construction, supported the Corps' effort.



Jim Mosner (left), engineering and construction, works with two volunteers from Habitat for Humanity.

Dredge Goetz makes maiden voyage upriver

The St. Paul District's newest vessel, the Dredge Goetz, gets a 17-foot boost in transit through the main chamber of the Melvin Price Locks and Dam near Alton, Ill., during its maiden northbound voyage on the Mississippi River, May 11. The Goetz was pushed

from its building site at Vicksburg, Miss., by the Vicksburg District's Motor Vessel Lipscomb.

The Goetz will be christened at a ceremony in Winona, Minn., June 24.

— Alan Dooley, St. Louis District, contributed to the Dredge Goetz feature.



Photo by Alan Dooley, St. Louis District

The Dredge Goetz:

- is 225 feet long by 39 feet wide and eight feet deep, with a five-foot draft;
- has a 22-inch diameter suction pipe with a 20-inch diameter discharge-pipe;

- has 4,010 total installed horsepower;
 - is not self-propelled, like the Dredge Thompson;
 - does not have quarter facilities, like the Thompson.
- The St. Paul District will be receiving a new towboat, the Motor Vessel General Warren in 2006, and the Quarters Barge Taggatz in 2007.

District partners with Wisconsin to restore Eau Galle River habitat

By Steve Clark, biologist

The Corps of Engineers' Eau Galle River Reservoir and Channel Improvement Project protects the village of Spring Valley in West-Central Wisconsin from floodwaters and is a valuable recreational asset to the community. However, the project has adversely impacted the Eau Galle River, a designated trout stream.

The district completed this project in 1969. It included a dam, channel enlargement and straightening of the Eau Galle River, as well as the modification of two tributary streams.

Within the past 50 years, most trout fisheries in western Wisconsin have rebounded in a positive direction. Changes in land-use, riparian corridor management, habitat improvement activities and water quality management have allowed many streams to revert to wild trout fisheries. The Eau Galle River downstream of Spring Valley, however, has not improved.

Historical records indicate this river once supported a self-sustaining cold-water fish community, including native brook trout. Unfortunately, survey work in the Eau Galle River has shown a decrease in the fish population during the past 15 years. The Wisconsin Department of Natural Resources believes the decrease in trout abundance is related to elevated stream temperatures and



Photo by Steve Clark

The above photo shows a downstream view of the completed channel in the Eau Galle River, about 1,500 feet from the dam in Spring Valley, Wis.

deteriorated habitat conditions on this river and that this is likely due to the flood control project and the land-use practices in the watershed.

Temperature monitoring by the Wisconsin DNR documented stream temperatures downstream of the dam frequently above the sustained upper lethal temperatures for brook and brown trout, around 78 degrees. Some factors potentially contributing to this problem included the release of warmer surface waters from the reservoir, impoundment of water behind a sheet pile weir and a lack of overhead vegetation. In addition to the elevated temperatures, the channel portion of the Eau Galle River lacked habitat diversity and structure.

The Wisconsin DNR and local conservation groups were concerned about the future of the Eau Galle River and began exploring measures to restore it to a healthy cold-water trout fishery. These concerns lead to a collaborative effort between the St. Paul District and the Wisconsin DNR. The first phase of this

effort, conducted in 2000, included a study of the influence of subsurface releases on downstream water temperatures. Through the summer of 2000, the Corps released the majority of the discharge through a subsurface outlet, where colder reservoir water was present.

Prior to this, much of the water was released from a surface outlet, where water temperatures approach air temperatures. Since beginning these measures, the Corps and the DNR monitored summer water temperatures in 2000, 2001, 2003 and 2004, and temperatures never once exceeded the sustained lethal limit for trout. Furthermore, contrary to early concerns, the subsurface release didn't negatively affect the water quality of this recreationally important reservoir.

The Eau Galle project staff have been instrumental in implementing the subsurface release plan. Their willingness to make the additional outlet gate adjustments on short notice has been vital to ensure the

Eau Galle, continued on Page 7

Eau Galle, continued from Page 6
success of this plan and will continue to be in the future.

Even though it seemed like much of the concern over elevated temperatures had been relieved, temperatures were still higher than preferred. Furthermore, there was an obvious need to improve the habitat structure in the channel portion of the Eau Galle River.

During construction of the flood-control project, the Corps dug a channel in the Eau Galle River for a length of about 2,300 feet below the dam in order to efficiently pass flood-flows. A sheet pile weir was installed about 1,000 feet downstream of the dam to aid in stream gauging. The wide channel resulted in slow and shallow water and a muddy bottom, all contributing to increased heating by the sun. The weir impounded a 1,000-foot long pool, further slowing the water and compounding the problem.

To alleviate these problems, under the authority of Section 1135 of the Water Resources Development Act of 1986, the district and WDNR began constructing a habitat restoration project. In August of 2003, the district's physical support branch removed the sheet pile weir and replaced it with a low rock weir, 400 feet downstream of the dam, to decrease the length and depth of the pool. This decreased the residence time of the water and, consequentially, warming from the sun.

Also, a narrow and deeper low-flow channel was constructed in the bottom of the flood channel, downstream of the new weir. The new channel was constructed with meanders and bank-overhang

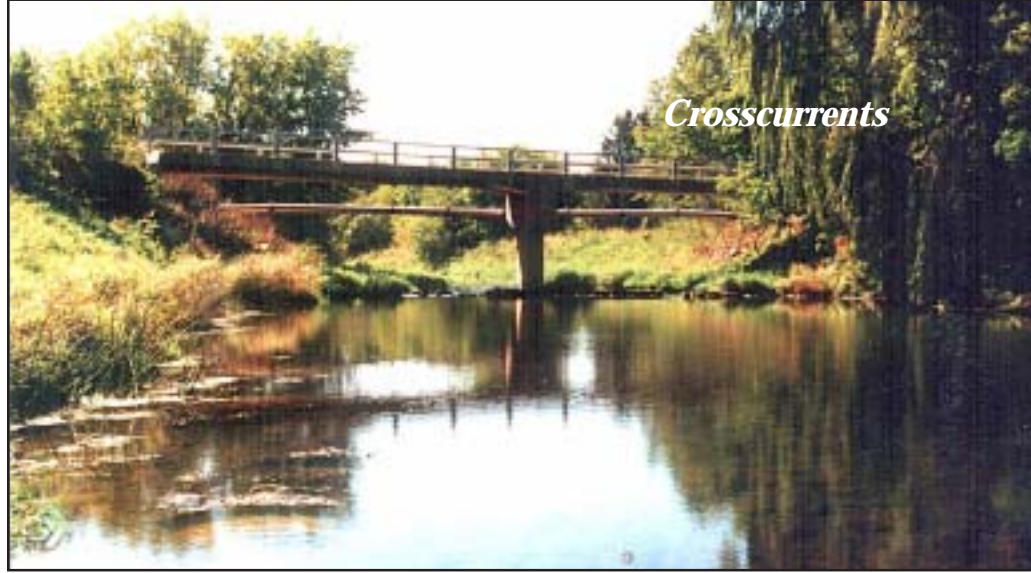


Photo by Steve Clark

The above photo shows the wide-and-shallow conditions on the river prior to the project, looking downstream about 1,500 feet from the dam.

structures to provide cover and habitat diversity for trout.

Additionally, the DNR was able to meet most of its 25 percent cost-share with work-in-kind by providing the construction services of their trout habitat improvement crew for the channel reconstruction.

The Corps and DNR discovered a problem early in the summer of 2004. The new rock weir was constructed with a small notch to pass water during low-flow periods. Unfortunately, some aspiring engineers from Spring Valley began placing rocks in the notch to slow the flow of water. Cleaning the notch was difficult and a solution was needed.

In late summer 2004, the Corps decided the small notch was not required for stream gauging, and the weir was reconstructed to include a large notch lined with flagstones. The district provided the rock, and the DNR, again, provided the construction services. The new notch is as wide as the reconstructed channel below it and has not been "reconstructed" by the youth of Spring Valley since.

All parties involved considered the project a success. While it will take some time for the project to influence trout populations, there has already been some evidence of success as trout have been found in the improved reach. Temperatures appear to be further reduced during the summer of 2004.

The district staff involved with the project worked together though obstacles smoothly and efficiently. The partnership between the district and the Wisconsin DNR was very effective and some good working relationships were developed between the district and the WDNR. Furthermore, WDNR staff expressed a desire to work with the district on similar projects in the future.

Finally, conservation groups, sportsmen and the general public, the real customers, expressed appreciation for the project. Trout fishermen I have spoken to at the project look forward to expanded fishing opportunities in western Wisconsin, an area that receives heavy fishing pressure from the local community and the Twin Cities.

News and Notes

Save June 24 for awards ceremony and family picnic

This year's summer awards ceremony will be held in Winona, Minn., to coincide with the christening of the Dredge Goetz on June 24. A bocce ball tournament, fishing demonstrations and pick-up softball and volleyball games are some of the scheduled activities. Transportation between the picnic and Levee Park will be available for the christening of the Dredge Goetz in the afternoon. Lunch includes chicken, hamburgers, potato salad and fresh fruit. Cookies, popcorn, snow cones and beverages will be available throughout the picnic. Ticket prices: Adults (non-EBF) \$9, Adults (EBF) \$7, Children \$5 and Non-Meal \$3. Schedule and ticket prices are subject to change upon finalization of events. Visit <https://mvpis.mvp.usace.army.mil> for more information. Field personnel can contact Denise Julson or Judy Harris at 608-687-9104 and retirees may contact Terry Zien at 651-290-5714 for tickets or further information.

Thrift Savings Plan open season begins

The TSP Open Season is in progress from April 15 - June 30. TSP open season brochures have been mailed to field sites and are available at the civilian personnel reception desk on fourth floor at the district office.

Announcements

Fisher selected as Corps' landscape architect of the year

Headquarters U.S. Army Corps of Engineers selected John Fisher, engineering and design, as its 2005



Fisher

Landscape Architect of the Year.

Fisher will receive his recognition at an awards ceremony in Dallas from Lt. Gen. Carl A. Strock, chief of engineers, on

Aug. 8. He received this award for his superior work on the Grand Forks, N.D./East Grand Forks, Minn., flood reduction project, a \$400 million project that includes more than \$20 million in recreation.

As a landscape architect, Fisher performs site and recreation design, planning, interpretive design and special graphics. Besides working as lead designer on the recreation and aesthetics team for the Grand Forks/East Grand Forks flood reduction project, he also serves as a landscape architect on flood damage reduction projects in Wahpeton, N.D.; Roseau, Minn.; and Newport, Minn. Fisher's past accomplishments include designing interpretative centers at Upper St. Anthony Falls and Lock and Dam

No. 7, and the Eau Galle Lake boat launch and fishing dock in Spring Valley, Wis.

"Fisher is rightly recognized as an expert within his field and provides outstanding service to the region," said John Bailen, engineering and construction chief. "He is well deserving of this recognition."

Fisher has worked for the Corps of Engineers for 13 years. He was a Corps' St. Paul District 2004 Civil Servant of the Year and the recipient of the Minnesota Chapter of Landscape Architects' 2003 Public Service Award for his work on the Grand Forks/East Grand Forks flood reduction project.

Krenelka selected as Mississippi Valley Division's Hard Hat of the Year

Headquarters Mississippi Valley Division selected Mark Krenelka, western area office, as its 2004 Hard Hat of the Year award recipient.



Krenelka

The Hard Hat of the Year award is given out annually by each Corps' division to recognize excellence in

construction quality management by district construction field

personnel. Krenelka will now compete with other division recipients of this award Corps' wide for the national award.

Krenelka is a construction representative currently working on phase three of the Grand Forks, N.D., flood control project and its related English Coulee Diversion project. Additionally, he deployed to the Middle East in 2004, where he served as project engineer for the Basrah Refinery and Shuaiba Power Station in Iraq. He received this award for his superior knowledge, ability, leadership, relationships, attitude and judgment.

"Mark [Krenelka] is a knowledgeable and conscientious employee," said Jay Bushy, also at the western area office. "He is proud of the projects and of the relationships which he has developed with the customer and the contractor. He is well deserving of this recognition."

Krenelka received his recognition in Grand Forks, N.D., from Tim Bertschi, the district's western area engineer, on April 18. He has worked for the district for the past three years.

Marynik receives student-engineering award



Marynik

The American Society of Civil Engineers selected **Lisa Marynik**, western area office student engineer, for a

2005 Outstanding ASCE Student Award. ASCE North Dakota Chapter presents this award annually to one student at the University of North Dakota, Grand Forks, N.D., and one student at the North Dakota State University, Fargo, N.D., annually. The award consists of a \$100 scholarship and is determined by the faculty at each of the universities.

Harvey Allen Gullicks, president-elect of the North Dakota ASCE Chapter, presented the award to Marynik at its section meeting April 26. Marynik is pursuing a master's degree in civil engineering at UND and is vice president of the ASCE UND Student Chapter.

Newcomers

Kyle Curtiss, student, began working at Lake Winnibigoshish and Lake Pokegama April 18.

Kurt Reppe, real estate, returned to the district March 30, after a four years overseas assignment in Italy.

Retirements

Gary Knapton, Green Bay regulatory office, retired April 1, with 32 years federal service.

Ronald Hogan, Lock and Dam 9, retired April 2, with 28 years federal service.

Weddings

Kenneth Mertes, Lock and Dam 5A, was married to Susan Manke, in La Crosse, Wis., April 16.

Births

Ivette Garrett, office of council, is the proud grandparent of Sofia Marquis, born April 27 at 6 pounds, 11 ounces and 17.5 inches.

Taps

Starkey Grove, Jr., construction-operations, died June 13, 2004. Grove worked for the district from 1957 to 1986.

John M. Welch, Sr., Lock and Dam 6, died May 6. Welch worked as a district lock operator for more than 30 years.

Tortoise camps out at Eau Galle

This African Spur-Thigh tortoise (right) was spotted by park visitors in the district's Northwest Day Use area, Eau Galle Lake Project, Spring Valley, Wis., May 9.

"It weighs around 50 pounds and is 24 inches long and 22 inches wide," said Dave Reynolds, park manager.

Corrine Hodapp, ranger at Eau Galle, said "They can weigh as much as 200 pounds."

The owners, from Menomonie, Wis., eventually retrieved their tortoise.



St. Paul District photo **Dave Reynolds**, park manager, Eau Galle Lake Project, holds a 50-pound tortoise.

March 2005 Employee of the Month

Eggers provides nationwide expertise on wetland science and regulatory issues

Tamara Cameron, regulatory branch, nominated Steve Eggers, regulatory branch, for going above and beyond his normal duties to help his fellow regulators.

Cameron’s nomination said Eggers serves as a technical resource to the entire branch as well as Corps of Engineers regulatory



Photo by Jon Lyman

Steve Eggers, left, and Tamara Cameron.

branches across the country. Project managers in regulatory count on him for his encyclopedic knowledge on issues related to jurisdictional determinations, functional assessments and successful wetland mitigation. He has been instrumental in helping the regulatory branch achieve its performance objectives.

In the past year, several controversial technical issues have arisen in the regulatory program, and Eggers provided the knowledge and expertise necessary to handle these issues. He has also been instrumental in initiating improvements to ensure appropriate wetland identification and assessment and to establish conditions to ensure successful wetland mitigation.

He regularly uses his free time to contribute to the field of wetland science. He is highly sought after for his expertise, which he provides to local agencies and organizations on his own time at no charge. In the past year, he has addressed important and controversial issues regarding the Corps’ obligations and duty under Section 404 of the Clean Water Act and other applicable regulations. This has helped regulatory stay focused on its mission to protect the region’s aquatic resources.

Eggers keeps up-to-date on advances in wetland science by doing research and preparing articles for publication in professional journals. The result has been a greater respect and legitimacy for the district’s regulatory program.

He truly represents the Army values, particularly selfless service, honor, integrity and personal courage. Despite the demands for quick and easy answers, he can be trusted to address difficult and time-consuming issues and adhere to the criteria of the regulatory program.

Lind set to unicycle the Alps this summer

Joe Lind, St. Paul District help desk, plans to join nine others from throughout the U.S. for a unicycle tour of the Alps, Aug. 1-19.

The tour begins in Fussen, Germany, goes through Austria, Liechtenstein, Switzerland, Italy, France and ends in Switzerland.

“Why go on the tour,” said Lind. “Because it sounds impossible and/or insane.”

For more, see the “Alps Unicycle Tour,” website at <http://www.aut.unitours.org/Riders.htm>.



Photo courtesy Joe Lind

Joe Lind, above, normally works at the help desk at the St. Paul District office, where he resolves computer problems.