Our Mississippi

PARTNERING TO KEEP AMERICA'S RIVER GREAT



The weather was clear, on July 12, 1887 in north central Minnesota. Warren Drought, the watchman at the Pine River dam in north central Minnesota, had been on duty since 5 a.m., mostly sluicing logs—a whopping 3,500,000 feet. But he somehow found a few minutes to write in his daily log book.

"A large number of natives passed here today going down river," he wrote. "A party of surveyors camped here today.

"The Corps is the largest water-based recreation provider in the country," said Tracy Spry, a park ranger at Iowa's Lake Red Rock, near Pella, Iowa. "We're here because of water. We build dams, and we have locks and navigation tasks on the river. That's where we originate from, and the parks came into being oftentimes after that."

Lake Red Rock, where Spry works, was completed in 1969. The \$88 million project was built mainly to control flooding



The many-faceted reservoir offers recreational opportunities that might surprise you.

The Minneapolis logs were all out of the lakes ... early this fore noon."

Today's operators don't have to worry about log sluicing, paddling natives or parties of surveyors while working on flood control or river flows. But they're multitasking just

the same. And campers and paddlers are still among those dropping by, and in huge numbers.

Some 25 million Americans will visit a Corps-sponsored recreation project at least once in the coming year. Just the three Corps districts on the Upper Mississippi River operate 6,051 camp sites, 35 beaches, 156 boat ramps, 23 lakes and 30 navigation pools.

St. Paul's Pine River Dam, now also the Cross Lake Recreation Area, was one of the first in the Upper Mississippi's dam and reservoir system when built in the late 1880s. But it wouldn't be the last.

along the Des Moines and Mississippi Rivers.

Flood risk management remains the primary mission, Spry said. The project drains some 12,000 square miles, gets water from as far away as southern Minnesota, and drains into the Mississippi at Keokuk, Iowa. Staff also helps the river maintain minimum flow during drought, and it's charged with tasks most visible to the typical visitor to what's now Iowa's largest lake: environmental stewardship and recreation fun.

The 50,000-acre natural area, the state's largest contiguous stretch of public land, is a popular stop for camping, birding, swimming, boating, geocaching, biking, kayaking—pretty much any recreational pursuit that exists. It's a regular spring migration stop for the white pelican, and The Nature Conservancy has named it a globally important bird area.

One day this past winter, Spry says, she counted 130 eagles while standing in one spot along the river. This time of year, a visitor may see 50 pelicans fly overhead at one time while taking an organized spring wildflower hike. A water trail's in the works for paddlers, and many visitors won't

Continued on page 2 >>

our Mississippi
is a quarterly
newsletter of the
U.S. Army Corps of
Engineers about its work
in the Upper Mississippi
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in cooperation with other
state and federal agencies
and other river interests
with whom the Corps
collaborates and partners
toward long-term sustainability of the economic
uses and ecological integrity
of the river system.

PELICANS: DAWN FLATTERY. FAMILY: TAMMY

"Camping with The Corps" continued from page 1...

miss the rare chance to help tag monarch butterflies in late

Regarding flood risk management, Spry said, "People are amazed at what a balancing act we have. There's a very detailed regulation plan of how the dam is operated. Sometimes that surprises people."

The same balancing act has always occurred at Pine River/ Cross Lake, where pristine lakes, wildlife and the unique North Woods history draw campers and day users by the thousands.

Some 100,000 day users come each season to the Pine Lake reservoir system, one of six run by the Corps in the headwaters area—to camp, boat, pick wild berries or attend programs on history or the natural world. The Corps-run visitor's center

RESERVE YOUR

contains artifacts from the early dam and also boasts an unusual 13-foot Paul Bunyan

RECREATION.GOV rag doll—especially fitting given the park's location on the 54-mile Paul Bunyan Scenic Byway, one wholly devoted to the tall tale.

But recreation wasn't the original idea here, either. For that, you can thank industries like lumber and flour, said Ray Nelson, the park manager. Financial success required that they be able to carry products by barge down a then too-shallow Mississippi River to thriving cities like Minneapolis/St. Paul.

"Around the Civil War time, some business people went to Congress and asked if the government could figure out a way to help solve this issue of the river drying up and not allowing the transportation of goods between Minneapolis and the Ohio River/St. Louis where supplies needed to go," he said. "So they had surveyors and engineers put together a plan for a reservoir system."

The natural lakes and tributaries in the headwaters area could be dammed up in summer and when opened could send water as far south as Lake Pepin and keep transportation routes navigable. Eventually, word got out about how great these reservoir areas were for fishing, hunting and nature time. "Dam tenders had people just coming and knocking on their doors and saying, 'Can we put our boat in? Go fishing? Put our tent up? Go hunting?'" Nelson said. "Even gang-

sters showed up, to get away from the hubbub of Chicago." In 1944, Congress passed a law that gave the Corps official permission to manage resources for recreation, he said, and the parks' reputation for quality quickly spread. "We get a lot of people coming whose grandparents and generations of the family used to camp here," Nelson said. "But most times people try to keep it a secret. They want to be able to get a campsite."



Lake Red Rock BY THE NUMBERS

13: miles of paved hiking/biking trails

36: species of mammals, including some

endangered or threatened

100: miles of shoreline

106: in feet, height of public observation tower, the Midwest's highest

302: species of birds identified, earning it the moniker "feather magnet"

600: number of modern campsites

15,253: acreage at normal conservation pool, making it Iowa's largest lake

50,207: acres of project land

134,900: cubic feet per second, highest inflow

of water: July 12, 1993

591.444: annual visits

1 million: seedlings planted by the Corps to reforest portions of the project

Agreement seeks to help nature take its course

Picture a stream meandering through a broad floodplain lush with wetlands, tall grasses, thick forests. Now imagine someone has come in (with the best of intentions) and straightened that stream, confining it to a narrow channel, then plowing up the natural landscape into tidy farm fields with nearby homes and businesses.

The problems likely to result—everything from the unwanted flooding of local communities to lost wildlife habitat—are what two agencies working within a broader partnership hope to rectify with a precedentsetting collaboration on floodplain restoration work along Minnesota's scenic Root River.

A formal cost share agreement has been signed between the U.S. Army Corps of Engineers and Minnesota Department of Natural Resources (DNR), the first such official agreement through the Corps' Navigation and Ecosystem Sustainability Program (NESP). The agreement details how the agencies will jointly work on reducing sediment that flows from the smaller Root into the larger Mississippi and restore some 3,000 acres of wetland, forest and prairies. And it paves the way for similar floodplain restoration work throughout the Upper Mississippi River system, says Tim Schlagenhaft, the project manager for the Minnesota DNR.

"This is very high-priority work we'd like to see done all along the river, and it's even more important as you go downriver where there is a much more leveed floodplain," Schlagenhaft said, "If we can set up a program that'll help make it easier to do these types of projects in other places, it'll provide a benefit to the whole river system."

Restoring Mississippi River floodplains to something closer to their historic appearance has been a major focus of the DNR's Mississippi River team.

Conversion of thousands of acres of floodplain into productive agricultural land has led to lost wetlands, prairies and floodplain forests preferred by wildlife. Channeling with levees has also led to more sediment being dumped into the Mississippi, sediment that historically would have been deposited slowly throughout the floodplain.

The project's goals include both habitat restoration and a 20 to 50 percent reduction of sediment entering the Mississippi

While many groups have worked for years to restore the region, converting much of the surrounding land into wildlife management or natural areas, this project leverages the resources of the Minnesota DNR. the Corps. and other agencies to meet the restoration goals of NESP. It'll also test some "winwin" methods for restoring floodplains, perhaps by helping landowners find new ways to make a living off their land that's both profitable and amenable to seasonal flooding. That might include planting a pasture grazing system, establishing native prairies that can sustain flooding and provide a biofuel crop. or helping landowners establish a flooding buffer around their property.

This project's restoration opportunities come amid scenic bike trails that meander amid the bluffs and attract thousands of enthusiasts each year. It also sets an important precedent, team members say.

"The exciting part is the model agreement feasibility cost share agreement, a first for NESP," said Jeffrey DeZellar, the NESP project manager for the Corps' St. Paul district. "This is also an area that's environmentally stressed and has a tremendous potential for restoration."



A sediment-filled Mississippi near the mouth of the Root River. A Corps of Engineers study showed the Root contributes 900,000 tons of sediment each year to the Mississippi.

Task force works to reduce flood risk

Water rushed over the banks of several Eastern Iowa rivers in June 2008—flooding even so-called "500year flood" regions and leaving in its wake serious injuries, some deaths, and billions of dollars of damage to cities, universities and farm fields.

Officials aren't waiting another 500 years to do some serious flood proofing.

The nation's first-ever Flood Risk Management Team

is now in place for the five states along the Upper Mississippi River, making it easier to respond quickly to rising waters.

"Where it before took upward of a week, two weeks to know even who to coordinate with, we can now coordinate a A barn in the oft-flooded town multi-federal/state agency of Hokah, Minnesota. response in less than a day for a flood emergency," says

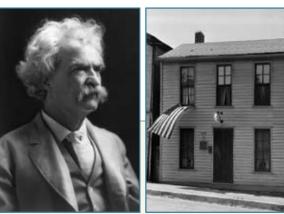
Hank DeHaan, one of the U.S. Army Corps of Engineers representatives on the team. "That's one big benefit of the activity going on."

The team includes senior staffers from the Army Corps, Federal Emergency Management Agency, U.S. Geological Survey, National Weather Service and several other agencies and organizations. Better coordination between emergency agencies, policy change advocacy and development of innovative alternatives to cutting the river off from its floodplains are among the group's current efforts. It also came together in Cedar Rapids recently to discuss unusually high spring river levels and discuss ways to minimize risks and protect natural resources.

One-stop shopping for homeowners or others in the midst of a flood emergency is one benefit of the regional group. It's also working to reduce flood risks on other fronts, says Jerry Skalak, another Corps of Engineers member on the team, representing Iowa.

Education on true flood risks is one ongoing group effort, through better explanation of terms like "100-year flood event" and updated maps of floodplains. Zoning recommendations would limit floodplain developments to take possible floods into consideration, favoring a baseball field over a housing development, for example. Non-structural alternatives to levees for reducing flooding also are being examined.

Learn more about the team at mvd.usace.army.mil/rfrmt



GO TO VISITHANNIBAL COM FOR A LIST OF HOMETOWN HAPPENINGS. OR TWAIN2010.ORG FOR RELATED HAPPENINGS AROUND THE WORLD.



Job share takes collaboration to new level

Todd Strole has an unusual job share arrangement. He's not sharing his job; two employers—organizations that often view the river from different perspectives—are sharing him.

Strole works part-time for The Nature Conservancy, part-time for the U.S. Army Corps of Engineers, in both capacities focusing on restoring the massive floodplain of the upper reaches of the Mississippi River. But it's not working at two organizations that poses the challenge.

The challenge (and historic opportunity) is tackling restoration needs on some 2.5 million acres of floodplain. at the bottom of a 189,000 square mile watershed.

During a recent Missouri Science Showcase, he explained how the river system has been altered. "The river above St. Louis is a series of locks and dams that has changed the flow. The landscape that feeds the river and watershed also has been highly altered, both for urban and suburban development and agricultural areas. That's all altered the hydrology, the way water gets into the system."

Additionally, he says, the separation of the floodplain from the river through a system of levees has altered how water moves through the system and impacted important floodplain functions. Those include the storage of flood waters, groundwater recharge, nutrient and sediment cycling, and the provision of spawning areas for river fish.



wouldn't typically interact

on a regular basis.

Strole's unique opportunity came from the Water Resources and Development Act of 2007 and its authorization of the Navigation and Ecosystem Sustainability Program (NESP). At the time, he was director for The Nature Conservancy's floodplain initiative within its Upper Mississippi River Program. The Corps saw a unique partnership opportunity to address some of NESP's ecosystem goals through a federal authorization that allows for cooperative employment arrangements with non-government organizations such as The Nature Conservancy.

"They asked me to look at floodplain restoration, in particular this legislation calling initially for 35,000 acres of floodplain restoration," Strole said. "They asked me to work with partners in all Upper Mississippi River states, all the nongovernmental organizations and state and federal agencies and private landowners, getting them interested in floodplain restoration, and harnessing the knowledge of this collective group of people toward successful implementation of this NESP legislation."

Strole now leads the Corps' Floodplain Restoration System Team, a 50-or-so member coalition comprised of experts in ecology, forestry, land acquisition, hydrology, biology, economics, agriculture and more—a diverse mix of experts who wouldn't typically interact on a regular basis.

The group identifies restoration needs, opportunities and strategies. That includes partnering to explore ways a private landowner on a floodplain could derive income from his or her land in a way also beneficial to the river.

Most days, it's hard to tell if he's wearing his Corps or The Nature Conservancy hat because the missions are so similar, Strole said. But working on the inside has led to new insights on the Corps' work and challenges.

"Their attention gets diverted to flood emergencies, hurricanes, or to global assignments in support of overseas contingency operations—important things," he said. "It gives you a better understanding of what they're up against."

Moving from an organization focused strictly around biodiversity to one with a much broader mission poses some challenges. But it also offers an unusual opportunity to blur the lines between organization and agency.

"We consider the Corps a very powerful partner when it comes to the river," he said. "This job is about how we can complement each other in a better, more efficient way."

It's the Year of Mark Twain in Hannibal, Missouri, as the author's birthplace celebrates his 175th birthday with special events, readings and gatherings. And if the anniversary does not alone motivate a Twain pilgrimage, consider this: 2010 also marks the 125th publication anniversary of Twain's "Adventures

of Huckleberry Finn" and the 100th anniversary of his death. Hannibal is always something of a mecca for Twain fans; last year 60,000 people visited the Mark Twain Boyhood Home and Museum. He once wrote: "In the small town of Hannibal, Missouri, when I was a boy, everybody was poor but didn't know it; and everybody was comfortable and did know it."



Construction underway at the Chickamauga lock in the Nashville District of the U.S.
Army Corps of Engineers.
Portions of the new lock are being made from prefabricated concrete boxes using in-thewet construction methods.

Standardizing lock designs saves time, money

Design work is progressing for the first two (of seven) locks scheduled to be built on the Upper Mississippi River System, following their authorization through the Navigation and Ecosystem Sustainability Program.

"Lock construction is currently on hold, but designing them on parallel paths, with plans to use the same basic design and construction method on future locks, could result in significant time and cost savings," said Jeff Stamper, NESP technical manager for engineering.

The seven new locks include Locks 20, 21, 22, 24 and 25 on the Mississippi River and Peoria and LaGrange on the Illinois River.

While the concept of mass production doesn't completely work in lock design and construction, there is room for standardization of some features, Stamper said. For example, construction preparation underway for Locks 22 and 25 through "Preconstruction, Engineering and Design" funding is focusing on a process that involves lock and guidewalls being built atop rock or pile foundations.

The engineering team is proposing that the lockwalls for locks 22 and 25 be prefabricated from concrete panels and steel framing on dry land and lifted onto a prepared foundation in the water, referred to as "in the wet." That process avoids the need for a cofferdam, or temporary structure built around the permanent one. The standardized part of the

concept is the use of prefabricated lift-in units that could serve as prototypes when the design phase begins for Locks 20, 21, and 24.

While there are modest design cost savings for Locks 22 and 25, which are being tailor-made for the given sites, designs are being made so that they'd be at least partially re-usable for subsequent locks, resulting in a significant cost and design-time savings for Locks 20, 21 and 24, Stamper said.

Currently, plans call for a draft design report for Locks 22 and 25 to be completed by Sept 30, 2010. During the following year, the reports would undergo review. New design work would begin as well to standardize the mechanical and electrical systems. The Corps is also working on LaGrange Lock, but it has made modest progress due to low funding levels, Stamper said.

The standardization between Illinois River and Mississippi River Locks will be considered, but site-specific conditions and constraints will likely result in unique solutions on the Illinois River, Stamper said. In fact, it is possible that the new locks for Peoria and LaGrange will not be "carbon copies" due to their own site and river conditions and constraints resulting in unique, site-specific solutions, he said.

That demonstrates the fact that standardized designs are not just used for standardization's sake, but to save time and cost.

"We're not far enough along on Peoria where we can make the claim that standardization is the way to go, but that'll certainly be in our toolbox," he said. "There are a few site constraints and river conditions that could drive you to different engineering solutions."



s the Panama Canal expands to double its capacity by 2014, the race is heating up to bring that new shipping traffic up the Mississippi River to ports in the St. Louis area.

Shipments of steel, agriculture commodities and other goods have slowed on the river

in recent years because of a sluggish national economy, increased competition from truck and rail shipping, and economic diversification that has made St. Louis and other river cities less dependent on the Mississippi.

But one port town in the region is aggressively seeking more river-based business with a multimillion upgrade of its facilities. The Tri-City Regional Port District, located just minutes from downtown St. Louis in Granite City, Ill., is planning a \$35 million harbor and rail connector to make it faster and more convenient for boats to be loaded and unloaded there.

Preliminary work on a new harbor and rail link at the port south of Lock 27—the southernmost lock on the river—is underway, thanks to a \$6 million federal stimulus grant from the U.S. Department of Transportation awarded in February. In addition, St. Louis and other port districts in the region are seeking millions of dollars in federal funds to upgrade facilities.

Port officials believe the St. Louis area, which is close to large Midwest markets and mostly south of the lock system that slows shipping traffic, is in a strong position to capture new business as a result of the Panama Canal expansion.

Currently, many ocean-going freighters that are too big to pass through the Panama Canal must unload on West Coast ports, where the cargo is shipped to the heartland by rail or truck. Officials are marketing the Tri-City port and others in the St. Louis area as a more cost-effective way to ship goods.

The future could include barges loaded with containers, which aren't common on the river now. Ocean-going container ships are rapidly becoming the industry standard, shipping industry officials say. Containers are easily transferred from ships to truck trailers or rail cars. And they can be sealed to prevent tampering, a plus for homeland security.

"The container business is growing from a global perspective, but we haven't seen it on the river yet," said Dennis Wilmsmeyer, general manager of the Tri-City Port. "There is an opportunity to make that happen here. We can load a barge with 800 different commodities in containers."

Granite City, founded as a steelmaking company town northwest of St. Louis in the late 1800s, has long depended

on its port for the shipment of steel, oil, grain and other agricultural products.

The Tri-City port's current harbor is north of Lock 27, resulting in a 45-minute slowdown as barges must pass through the lock before they can be unloaded. But the new harbor is located south of the lock, where the river flows freely to New Orleans. It is being expanded, partly to handle the expected increased traffic resulting from the \$6 billion Panama Canal widening.

"That's what makes this new facility so useful and exciting for us." Wilmsmever said.

Private companies located in the 1,200-acre port districts will pay for \$11 million of the \$35 million project. In addition to the \$6 million grant, the port district is working on raising the remaining \$14 million needed to dig the new harbor, and build roads and rail connectors.

Wilmsmeyer said the harbor project will be built in phases as construction funds become available. It's expected to be completed by about the end of 2012. The new harbor is expected to generate 2,466 construction jobs and 837 permanent port jobs, according to its stimulus grant application.

Abengoa Bioenergy, a Spanish-based firm, recently built an ethanol refinery in the port district in anticipation of being able to ship its product more easily through the expanded harbor. The refinery has the capacity to produce 90 million gallons of ethanol a year. Currently, about 3 million tons of cargo moves through the port, utilizing river barges, trucks and rail cars.

Some logistics experts say the Panama Canal expansion may not benefit Tri-City and other ports as much as port officials hope. That's because it takes longer to move goods long distances by barge than it does by truck or rail. The trip from New Orleans to St. Louis for some goods can take a week compared to a day by rail. But oil prices, expected to rise as the economy emerges from recession, could change the economics of that equation.

Port officials say river barges can move more cargo using less fuel than required to ship it by rail or truck. Plus, they say, companies can avoid highway traffic tie-ups and slowdowns at rail terminals by shipping their goods on the river.

"The river is a great natural resource that's totally underutilitized," Wilmsmeyer said.



MY MISSISSIPPI

Jack Libbey, 54, former towboat pilot and founder of Mississippi Explorer Cruises.

"I knew when I was a little guy that I was gonna be a riverboat pilot. And I was very lucky. In the early 70s, they started opening up the grain trade to China and Russia, and they couldn't build enough towboats or find enough pilots. I graduated from high school at 17 and went to work on the river.

"My company had me working with some of the best pilots until I was pushing 50 or 60 barges with my 7,000-horsepower boat. One guy taught me a lot of its history and wisdom. Did you know that spring moves north and fall moves south at 30 miles a day? If one day the lilacs are blooming in Lansing, then tomorrow they'll be blooming in LaCrosse."

"Eight years ago, I started this company to take people into the Upper Mississippi River National Wildlife and Fish Refuge. It's 240,000 acres of wooded islands, marshes and backwater. We even go through locks and dams, and in the spring we visit eagles on nests that look as big as beaver lodges.

"The Mississippi is my life, my passion, my entertainment. On days when things don't go right, you can get on your boat or sit on the riverbank and it all goes away. And it's done that for generations."

If you go: Tours depart from La Crosse or Prairie du Chien, Wis., Lansing, Iowa, and Galena, III. Details vary, but a 2-hour outing is \$20 for adults and \$15 for kids 4 and older. mississippiexplorer. com, 877-647-7397.

DID YOU KNOW?

The Jefferson National Expansion Memorial in St. Louis (A.K.A. Gateway Arch) is the tallest monument in America at 630 feet.



In 2007, Congress approved a variety of improvements to the Upper Mississippi River System through the Water Resources Development Act. The approved Navigation and Ecosystem Sustainability Program (NESP) calls for massive improvements to both the river's navigation corridor and its ecosystem. On the navigation side, improvements include seven new locks, five on the Upper Mississippi River System and two on the Illinois River. Funding has been appropriated to start the lock planning process; however, no construction can proceed without

New locks borrow from lessons learned

Engineers working on Upper Mississippi River locks are "actively seeking lessons learned" on other major lock construction projects across the nation, even taking field trips to borrow from the best ideas being implemented elsewhere.

The ability of one project design team to visit another project site—and even spend time—stems in part from the culture of sharing developed through a Regional Navigation Design Team that started meeting 16 years ago, said Jeff Stamper, the team's current chairman.

"One of the beauties of a regional navigation design team is that it's really a network, almost a nationwide network that includes many divisions and project lead engineers on the nation's most complex navigation projects. They all come to the table at these meetings with excellent ideas, and between meetings we have this network that functions to share information. It's an actively-seeking-lessons-learned tool, and it's very powerful in that regard."

The team was originally formed by the Ohio River Regional Office of the Great Lakes and Ohio River Division to incorporate more innovations in navigation structures. It has since expanded to help address navigation programs facing the industry as a whole. But part of its charge remains the sharing of lessons learned, said Stamper, who also serves as technical manager for engineering for the Navigation and Ecosystem Sustainability Project (NESP), through which the Mississippi River locks will be built.

"Since we know these projects, we know the lead engineers and know there are lessons to learn from them," he said. "We can send the team to these sites and to meet the project engineers, to compare their projects with ours and see where similarities can be drawn and lessons can be capitalized on."

The visits have targeted other new locks using "in the wet construction," a method that helps keep the channel open throughout most of the construction process. With such a method, a foundation is prepared underwater. Then prefabricated models, much like Lego-built structures, Stamper says, are made offsite and lifted onto a prepared foundation. Modular-type construction continues until the lock walls are completed. This process offers an opportunity to build in areas in which traditional cofferdam construction would be unfeasible.

Chickamauga, a project located on the Tennessee River near Chattanooga, is one site the Mississippi lock design team has actively studied. That project, which is replacing the current structurally unstable lock, is using prefabricated concrete and steel lift-in boxes, very similar to what's planned for the first Upper Mississippi River locks.

"We were able to observe their on-site construction, including the installation of foundation in the wet," Stamper said. "Being able to observe how one contractor chose to lift in 300-ton units in the wet was a really great lesson."

additional funding.
Our.
Mississippi



Gobbling, spitting, booming and strutting wild turkeys; drumming ruffed grouse; drumming and crowing ring-necked pheasants; dancing and booming prairie chickens; mating displays of trumpeter swans and sandhill cranes.

No, this is not a dance ritual of some indigenous river tribe. It's one eco-tour operator's description of the show you'll see in mid-May along the Upper Mississippi. And then there are the migrating warblers, sandpipers, loons, grebes, mergansers, ring-billed gulls, snow buntings, waterfowl, and more.

May 8, deemed international migratory bird day, is an especially promising time to catch a spring birding festival along one the world's preeminent migration flyways. More than 300 bird species use the river corridor as home or a stopping-off point during migration.

The culmination of the week-long "Wings of Spring" festival is held that day at the Riverlands Migratory Bird Sanctuary near St. Louis, a 3,700-acre Corps of Engineers-run natural area complete with

Here, and at other wildlife sanctuaries along the river valley, visitors will likely be joined by colorful songbirds heading back from the tropics. Shorebirds are common at Riverlands, and visitors can see species rare elsewhere: the American bittern, Wilson's thalarope and American golden plover, among others.

The Great River Road website lists other good birding locales, many along spectacular bluff overlooks (greatriverroad.com/nature/birdsites.htm). The Mississippi River also boasts the nation's largest virtual birding trail. The Audubon Society's Great River Birding Trail website (greatriverbirding) lists some 400 promising birding sites; the clickable map also indicates other recreational opportunities at each location.

Spring is special

for the dramatic

movement of ex-

tremely colorful

and vocal birds,

but those planning

trips for any time of

the year are in luck,

Reid, director of

bird-wise, said Bruce

Wildlife Management Area No. Transpassing

restored wetlands, prairies and even a heron pond. The sanctuary is a "slam dunk" for bird sightings, says David Ringer, the National Audubon Society's Mississippi River Initiative Communications Coordinator. Audubon has a close partnership with the Corps at Riverlands. The groups share facilities and staff, says Patricia Hagen, executive director of the Riverlands Audubon Center, and visitors win by the wealth of guided bird hikes and other interpretive programs.

Conservation Outreach for Audubon's 9-state restoration and education project. Some so-called neotropical migrants—birds who winter in the tropics, then head to northern breeding grounds in spring—don't reach northern river reaches in Minnesota until late May. Some wading birds who stop to breed at the southern edge of the river are also starting to move about then, and not long after other birds are getting ready

"There's almost never a time when something isn't migrating up and down the river," he said.

FEATURED FESTIVALS

May 1 and 8, St. Louis

Wings of Spring Festival Birding Trips. Guided tours. wingsofspring.org

May 1 and 8, Prairie du Chien, Wisconsin

Guided hikes for songbirds like cerulean warblers and scarlet tanagers, Effigy Mounds.

May 8, Alma, Wisconsin

Spring birding by Mini-Train. Spot birds by train at mouth of Chippewa River on the Mississippi.

May 7–9, St. Paul

Spring Warbler weekend. Beginner bird hikes, evening owl walks and games, Frontenac State Park.

May 7-9, E. Central Wisconsin

Horicon Marsh Bird Festival. Bird banding, hikes, pontoon boat tours, canoe and kayak.

May 15, Trempealeau, Wisconsin

Annual birding festival.
Trempealeau National
Wildlife Refuge,
fws.gov/midwest/
Trempealeau

May 13–16, St. Paul

Urban Bird Festival. The St. Paul Audubon Society sponsors 16 free bird hikes for all levels around the city and its suburbs.

Best places to bird

Trempealeau National Wildlife Refuge and

Highlight: wetlands that draw American white pelicans, sandhill cranes, great egrets; flocks of

Pikes Peak State Park and Effigy Mounds

Highlight: Colorful songbirds viewing from

Highlight: migrating songbirds from rugged bluffs, nesting red-shouldered

Savanna District National

Fish and Wildlife District,

wildlife refuge used by a large

rcentage of migratory birds

Riverlands Migratory

Highlights: wading birds

ike sandpipers, plovers,

herons; American white

ican; songbirds.

Bird Sanctuary,

West Alton, Mo.

Highlights: 46,000-acre

in the Mississippi Flyway,

vasback ducks.

including tundra swans and

National Monument, McGregor, Iowa

overlook near bear mound.

Wyalusing State Park,

Prairie Du Chien, Wis.

Nauvoo State Park,

Highlights: White

esser scaup and

migration at river

site named from

Hebrew word for

beautiful place.

Caspian terns during

Perrot State Park, Tremnealeau Wis

along the river

Black Hawk State Historic

Highlights: Path to cliff brings

eve-to-eve view of migrating

tanagers and vireos. Borders Rock River in Rock Island

County forest in a city

warblers, wood thrushes, scarlet

Site, Rock Island, Ill.

Highlight: bluff

nore than 260

species: warblers, hawks, shorebirds

Myrick Marsh by the Universit

of Wisconsin, LaCrosse, Wis. Highlight: green oasis mid-city

drawing migrating warblers,

American hittern, sandhill cra

Ted Shanks Conservation

Area, Ashburn, Mo.

Highlights: Viewing by

car of rare wetland birds

trumpeter swans, least

Clarence Cannon National

Wildlife Refuge, Annada, Mo.

Highlights: flocks of migrating

nallards, geese and blue-winged

egrets, shorebirds, rails,

teal: resting habitat for herons.

FOR MORE, GO TO AUDUBON'S

GREAT RIVER BIRDING TRAIL

GREATRIVERBIRDING.ORG

and American bitterns

king rails, more.

sparrows and wrens

top viewing of

Small business owners: The Corps wants you

Contracting with small businesses can be a challenge for the Army Corps of Engineers, an agency best known for its multimillion-dollar contracts for levy repair and floodwall protection.

"So much of what we do is large stuff," said Doug Davis, deputy director for small business programs in the Corps' Rock Island District. "There aren't many small companies that can be bonded for a \$60 million contract."

But a move in recent years to outsource more government services has given the Army Corps and small companies more opportunities to do business with each other. The Corps is reaching out to those potential contractors, who provide everything from sand bags to solar panels, through numerous small business conferences throughout the year.

Among the biggest is the annual Midwest Small Business Government Contract Symposium. This year's conference was held April 11 and 12 in Moline, Ill. There, some 300 small business representatives learned how to navigate the complexities of contracting with the Corps and other areas of the federal government.

Sponsored by the Iowa-Illinois Chapter of the National Defense Industrial Association, the two-day symposium and trade show featured presentations from District Commanders and other officials from various branches of the Mississippi Valley Division. One conference day even featured a Society of American Military Engineers District Engineers' Commanders Briefing in which District Commanders discussed upcoming projects and contracting needs.

Last year, the Army Corps contracted for a record \$756 million in goods and services with small businesses including more than \$300 million in the Rock Island, St. Paul and St. Louis districts. That's partly due to an Army Corps requirement that general contractors who receive contracts of more than \$3 million utilize subcontractors, a stipulation that gives small businesses more opportunities to get Corps work.

But meeting all the government's requirements for becoming a contractor can be a daunting task for small businesses, said Vicky Miller, director of the Illinois Procurement Technical Assistance Center at Black Hawk Community College in Moline. Her center helps small businesses become certified as government contractors and guides them through the voluminous paperwork and regulations required in bidding contracts. Funded by the Department of Defense and the state of Illinois, the center's services are free of charge.

"The government is buying more things and contracting more than ever with private companies," said Miller, who spoke at the conference. "It's issuing billions of contracts yearly, but most small businesses don't think about that

opportunity."

For more information Government contracting is increasing in no small meaabout contracting with sure because of the \$787 bilthe Army Corps of Engineers in the Upper lion American Recovery and Midwest Region, visit Reinvestment Act, known as these sites: the federal stimulus package. The Corps also is seeking mvr.usace.armv.mil to increase business with mvp.usace.armv.mil several mandated groups, mvs.usace.armv.mil including those owned by women and service-disabled

veterans, and those located in Historically Underutilized Business Zones.

Despite the challenges, Davis said the Corps is proud of its efforts to boost small business activity. "The Corps has an excellent record," he said. "We're one of the best in the federal government in contracting with small businesses."



MY MISSISSIPPI

Vince Shay, 60, The Nature Conservancy's director, Upper Mississippi River Program

"My Mississippi is a memory from late spring of 1978 when I crossed I-90 on my way to Austin, Minn., for a job interview. I was low on gas, and I needed to check my map for refueling opportunities. I pulled off under a street light and rolled down a window so my map could catch some illumination. Instead, I caught a car full of mayflies.

"My Mississippi is a little stream called Dobbins Creek in Minnesota that ran through the sanctuary of the nature center at which I once worked. There were yellow-crowned night herons in its shadowy depths.

"My Mississippi is the Cedar River in Mitchell County, Iowa, where I bought a cottage in 1984, and the countless pleasant hours wading, fishing and floating on this utterly Iowa landscape with family and friends.

"My Mississippi is the expanded world I have been exposed to since taking a position with The Nature Conservancy's Mississippi River Program in 2006. I have read. listened to others and visited many places from Lake Itasca to New Orleans with a hundred stops in between Lam alternately humbled by the enormity of the river basin and all that it means to so many, and flattered to have my own bit of history with such a wondrous bit of creation. My Mississippi is... a very bia river."

6 Mississin

OUR MISSISSIPPI KIDS

Fun with birds along the river



CONTENT PROVIDED BY RIVERWORKS DISCOVERY®.
ILLUSTRATIONS BY KERRY SMITH

BEAKS & FEET

You can tell a lot about the food and habitats of birds by looking at their beaks and feet. Working backward, if you know what a bird eats and where it lives, you can probably determine the kind of beak and feet it has.

In the next column are descriptions of the food and habitats of some birds of your local watershed. Below are pictures of their beaks and feet. Your task is to match the descriptions with the pictures.

ANSWERS: 1: 3,A. 2: 1,C. 3: 2,D. 4: 4,B.

| Which bird | l wades | along r | riverban | ks and | marshe | es lool | king fo | or fish | and t | frogs t | to |
|------------|---------|---------|----------|--------|--------|---------|---------|---------|-------|---------|----|
| spear and | eat? | | | | | | | | | | |

Beak number: Feet letter:

Which bird skims along the river watching for fish to scoop up? It nests on riverbanks and often floats and paddles on the water.

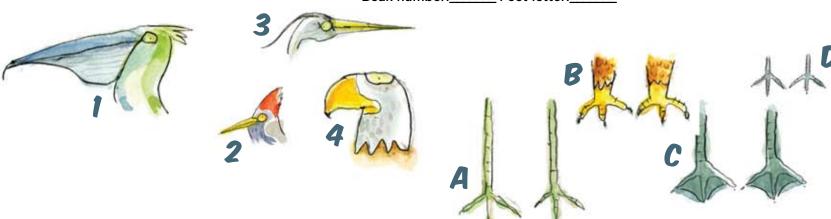
Beak number:_____ Feet letter:____

Which bird nests in trees and clings to tree trunks to dig and eat insects from the bark?

Beak number:_____ Feet letter:____

Which bird circles high above the river from its tree nests, watching for small animals to grab and eat?

Beak number:_____ Feet letter:____



BIRD HABITATS

Different birds require different habitats. Some birds live in wetlands such as swamps and marshes. Others live in forests. Some species live in meadows or grasslands. No matter where a bird lives, it must have water to drink, food to eat, shelter from the weather and from predators, and a safe place to raise its young.

Look around you. Can you see any birds?

Are there any clues to tell you what they might eat?

Where might they sleep?

Is there a good place for shelter nearby?

Where might they have a nest? Is it somewhere near or in a faraway place?

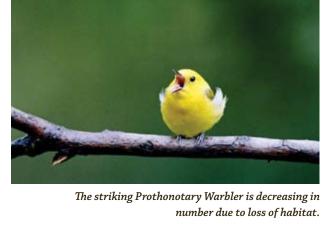
Can you see more than one type of bird?

How do they differ from one another?



Draw a picture of a bird you see and its surroundings.





Creating a bird-friendly habitat at home

Restoring your own piece of the planet for the birds is as easy as providing their four basic needs: food, water, shelter, and space. If you can build the proper habitat in your yard, you will attract a variety of birds. The secret is to offer a lot of options for food, shelter, and nesting. Planting native plants is also key. Those that naturally occur in the region in which they

evolved are adapted to the local soil, insects, and climate patterns. By using native plants, you will attract birds that have historically been connected to your area.

Plant many different kinds of plants. Shrubs, trees, groundcover, vines, and annual and perennial flowers offer different plant heights and growth habits that are attractive to a variety of bird species. Flowers planted in masses will attract birds with their color. Purple coneflowers are great for attracting butterflies when they bloom and American Goldfinches when they go to seed. American Elderberry makes tiny purple berries that birds love.

Cover supplies protection from weather and predators and is critically important during the raising of young and while birds sleep or rest. The American Blackberry is a dense, fruit-producing plant that provides good shelter for nesting. Highbush Blueberry provides flowers, fruit, and cover.

A water source is vitally important, too, and can be just a simple birdbath. Just place it close to plant cover to help birds avoid predators.

The main idea is that variety rules. Be diverse, and you will be attracting local bird species in no time!

TEXT BY ERIN HILLIGOSS-VOLKMANN, USACE ENVIRONMENTAL EDUCATOR

Make Simple Birdy Baskets

MATERIALS

Orange Spoon Small knife

6 pieces of string Birdseed

INSTRUCTIONS

- 1. Cut the orange in half. Carefully scoop out the halves, leaving the peel intact. Use the knife to poke three holes evenly spaced near the edge of the peels.
- 2. Tie one piece of string through each hole and then tie all three pieces together at the top. Repeat for the second orange half.
- 3. Fill the orange baskets with birdseed and hang near your house. Watch carefully to see the different types of birds that come to eat.

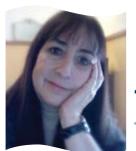
DID YOU KNOW?

Under the right conditions, certain freshwater mussels found in the Mississippi River live up to 100 years. This lifespan is one of the longest for any creature on Earth.





Mona Smith's photos of Minnehaha Creek. See more at flickr.com/photos/ bdotememorymap



MY MISSISSIPPI

Mona M. Smith, 58, Dakota media artist/producer/ director and contributor to the University of Minnesota "River Life" program, St. Paul

"I grew up in Southeastern Minnesota on the river. The river's always been important to me, but in an unclear way. I knew Dakota people had always lived there, but little else.

My auntie had a house right on river, across from Red Wing. One of my earliest memories was being in a flood and getting in a rowboat and rowing right from her doorstep. My Dad was a turtle hunter and part of my childhood involved soup and turtle roasts.

"The confluence of the two rivers (Mississippi and Minnesota) is where we are told Dakota people originated. The area is parallel to the Garden of Eden; it is also, many modern Dakota say, the place of our genocide. I, being a pawn of my ancestors, keep being drawn closer to the *bdote* area (where two rivers come together). I now live on Minnehaha Creek, within walking distance to Coldwater Springs.

"Through my work, I've been able to ask the questions that needed to be asked, gather some stories, and most important, to develop my own relationship with these places. One elder I interviewed I asked particularly about St. Anthony Falls. He said, 'These places tell us who we are and how we are to be.' When we don't have access and a strong relationship to these sites, it makes our lives more difficult than they need be.

"As one person put it to me, Sedona, Arizona has nothing on the bdote area. It is a very important spiritual place to all people, even though not all people recognize it consciously."

"My Mississippi is my teacher. It teaches me about time, it teaches me about the planet, it teaches me about the nature of change and continuity, and it connects me to my ancestors and all Dakota people."

Learn more about Smith's work and upcoming shows at bdotememorymap.org or riverstories.umn.edu.





MY MISSISSIPPI

Jon "Hawk" Stravers, 60, Driftless Area Coordinator for Audubon's Mississippi River Initiative and musician, Big Blue Sky, Harpers Ferry, Iowa (River Mile 640)

"This is year 33 for Red-shouldered hawk inventory for me on the Mississippi River. There's another sense you go with if you've been working with a bird for 33 years. This time of year, I get all wired up. Imagine what it feels like if you're a wild bird looking at sitting on that nest for a month. Man, that's asking for a commitment. You can get snowed on, rained on, and you have to sit through the whole thing. It's just terrible.

"The first few days they're on a nest, my whole body responds. If we get bad weather, I get really crabby. I just want them to have a smooth transition. Who would have predicted that you'd become emotionally attached to the birds you're studying?

"My music is really the same. Almost every song is about the emotional connection, the spiritual connection, to these habitats and the birds and the vibrations of the planet and the seasons. It's all interlaced in the music.

"This work is a humbling thing, and it's the happiest thing in the world for me. I'm devoted to listening to what these birds have to say."

Check it out: Look for Big Blue Sky performances at bigblueskyproject. com. A portion of proceeds go to river bird conservation programs.

FROM THE PROJECT MANAGER

Environmental Management Program

The Environmental Management Program (EMP) was established in 1986, making it the first comprehensive ecosystem restoration, monitoring, and research program on a large river ecosystem in the nation and world. Perhaps even more significant is the way it pioneered the development of strong regional partnerships through multi-state and multi-agency collaboration. As EMP approaches its 25th anniversary, Regional Manager Marv Hubbell shares a little of where the program has been, what it has achieved, and where it is headed.

What it is

EMP has two major components – the Habitat Restoration and Enhancement Program (EMP-HREP) and the Long Term Resource Monitoring Program (EMP-LTRMP).

The EMP conducts ecosystem restoration and scientific monitoring and research on the Upper Mississippi River System, from the confluence of the Ohio River to Minneapolis/ St. Paul, and on the Illinois River to near Chicago. This complex work requires the expertise of multiple technical and scientific disciplines. It's done through a network of six biological field stations in five states where long-term data are collected for fish, water quality, and submerged aquatic vegetation in order to monitor their status and trends over time. In addition, data is collected over the 2.7-million acre floodplain ecosystem: bathymetry (measurement of water depth), LiDAR (topographical information), and land cover/land use.

What we've done

Through the ecosystem restoration efforts conducted as Habitat Rehabilitation and Enhancement Projects we have completed 50 projects that have benefited approximately 85,000 acres of habitat. This represents a little more than 3 percent of the floodplain of the UMRS. These projects have restored islands in the rivers, improved habitat for fish to help them survive critical periods in both the winter and summer, improved habitat for migrating shorebirds and waterfowl and restored bottomland hardwoods over portions of 1,200 river miles. There are currently nine projects under construction and another 20 projects in the planning or design stage.

Some of what we've learned

To date, the monitoring network that includes the Corps of Engineers, the U.S. Geological Survey and states of Illinois, Iowa, Missouri, Minnesota and Wisconsin has collected more than 2 million records of data on fish, water quality, and submerged aquatic vegetation.

Based on data that has been collected in the Mississippi and Illinois Rivers for more than 100 years, including what has been collected for nearly 25 years by the EMP-LTRMP, we know that we have the same assemblage (species mix) of fish in the UMRS today as we had more than 100 years ago; however, about 39 are now considered as endangered



Regional Manager Marv Hubbell

or threatened in one or more of the five states that border the river. In addition, 11 invasive species, such as the Asian carp and common carp, now make up between 30 and 80 percent of the weight of the fish in the river. A combination of habitat degradation and loss, along with increased competition from invasive species has clearly put a lot of stress on the native fish community.

Successes

In 2009, the Regional EMP Partnership completed a five-year strategic plan for the EMP-LTRMP and will be embarking on a similar plan for the EMP-HREP in August of 2010.

One early success has been the award of \$3,000,000 in Federal stimulus funding to complete the collection of the surface topography of land and the collection of systemic bathymetric data. That will allow for the creation of a seamless topographic data layer above and below the water. This will reduce the cost and time required for planning and designing of habitat restoration and flood damage reduction projects and help in the development of systemic river system models.

Why does it matter?

A healthy river requires viable populations of fish, mussels, migratory waterfowl, plants, and other species to increase the richness and resilience of this important ecosystem which enriches our lives. EMP helps to restore and maintain the river processes and habitats that are vital to support these populations. There is an intrinsic value to the natural world, and that is what Congress recognized when it declared the UMRS as both an important ecosystem and an important inland navigation system.

BARGE TRAFFIC ON THE RISE

The Upper Mississippi River saw more traffic in the 2009 shipping season than it did during the previous year, a potential indicator that shipping is recovering somewhat from the recession. Commercial shipping traffic increased for 10 of the 13 uppermost locks and dams on the Upper Mississippi River, according to U.S. Army Corps of Engineers tracking information. Recreational boating traffic went up as well on most sites, too. Lockmasters say they expect a busy start to the 2010 shipping season.

River towns "distinct"

In its list of 2010's "Dozen Distinctive Destinations," the National Trust for Historic Preservation has singled out St. Louis for its quaint neighborhoods, cobblestone streets, thriving industry and Southern traditions. Cedar Falls, lowa, another town in the river basin, was called notable for its recreational opportunities like kayaking, small town charm and family vacation bargains.

DID YOU KNOW?

The historic lumber town of Grand Rapids, Minnesota, is also home to actress Judy Garland. Her childhood home is open to the public.



EDITORIAL: THE RIVER CAN COUNT ON US

Working to protect the land, water and people of the Mississippi River basin Written by Rebeca Bell, Manager

At a festival in a Mississippi River town last summer, a man looked at a large map of the River and said, "I had no idea the River ran through ten

Unfortunately, this gentleman is not alone. Too few people know much about the River that flows through our own backyards, from Lake Itasca in Minnesota to the Gulf coast of Louisiana. We are woefully ignorant of the River's economic benefits, abundant wildlife, beautiful vistas, cultural connections and the serious dangers that threaten these things, not to mention its simple geography. Geography lessons aside, though, how much we know about the River does have a direct correlation with its health and our behaviors. The more we know about the River, the better we can help protect it.

We love what we know and protect what we love. That is why a coalition of non-profit organizations from throughout the Mississippi River region is working to raise awareness about the River and the many simple actions that we can all take to protect this national treasure.

To discern the best ways to reach and inspire people in the region, in 2007, the Mississippi River Network commissioned the first-ever public opinion research of the entire watershed. This public opinion research helped the Network understand what residents of the region know about the River, what they feel about it and what they are willing to do to help protect it.

For example, our research shows that most residents of the Mississippi River region classify the River as a national treasure. Yet, only two in five respondents visit this national treasure more than a few times year, even among those who live extremely close to its banks. Respondents generally view the River as an asset that has always been there and will always be there. They think very little about it and the serious dangers that threaten it.

Overall, our research shows that most respondents take the River for granted—we regard the River as an important part of the community in theory, but generally do not translate that concept into action.

Yet, we know that residents must take action if we want to truly protect the Mississippi River for future generations. By carefully considering the values and priorities of the River residents, the Network created a specialized public education and outreach campaign, called 1 Mississippi, to inspire residents to connect with the River and take actions to protect it.

1 Mississippi reconnects people to the River, raises awareness about threats to the River and motivates people to take action to protect the River. The message is simple: our great River is in trouble, but we can make it better for future generations. The campaign encourages concerned people to take ten specific actions and join the effort as a River Citizen. Whether in armchairs or wading boots, River Citizens protect the River by speaking on its behalf and caring for it in simple ways that make a big difference. 1 Mississippi recruits River Citizens and shares River information through several creative and effective pathways, including media attention, unique informational and promotional materials, a traveling exhibit at events along the River and a comprehensive website.

With a growing community of informed, engaged and active River Citizens from all across the region, we can make real progress toward protecting our precious River.

Sometimes, the road to action is long. But it is not endless. The man who had no idea that the River ran through ten states last summer was so motivated by what he learned that he also took action. He became a River Citizen.

Sometimes it all begins with a simple geography lesson.

Written by Rebeca Bell, Manager of Communications, Biodiversity Project



CAN THE RIVER COUNT ON YOU?

The once mighty Mississippi River is in trouble. Pollution from untreated sewage, farms and factories along with weak enforcement of water laws has caused our great River to decline. But we can help! By standing up for the River and making simple lifestyle changes we can reclaim the Mississippi for future generations. **The 1**Mississippi campaign promotes 10 simple actions that can add up to a big difference for the River.

The first action is to become a River Citizen. River Citizens commit to taking actions—from volunteering on the River to reducing fertilizer use. River Citizens also get involved by teaching others in their community about the Mississippi River. Become a River Citizen at **1mississippi.net.**

ABOVE: Lake Itasca and headwaters of the Mississippi River in Itasca State Park, Minnesota.

Our. Mississippi





Tell us what you think.

For questions or comments, please contact the following U.S. Corps of Engineers regional outreach specialists: Kevin Bluhm, St. Paul, 651-290-5247; Angela Freyermuth, Rock Island, 309-794-5341; Laurie Farmer, St. Louis, 314-331-8479, or Kimberly Rae, West Alton, 636-899-0050. Or email story ideas, questions or comments to Editor Kim Schneider at editor@ourmississippi.org.

For more information or to view the newsletter online, go to ourmississippi.org. There, you will find a "subscribe here" link if you'd prefer to get this quarterly newsletter sent to you via email.

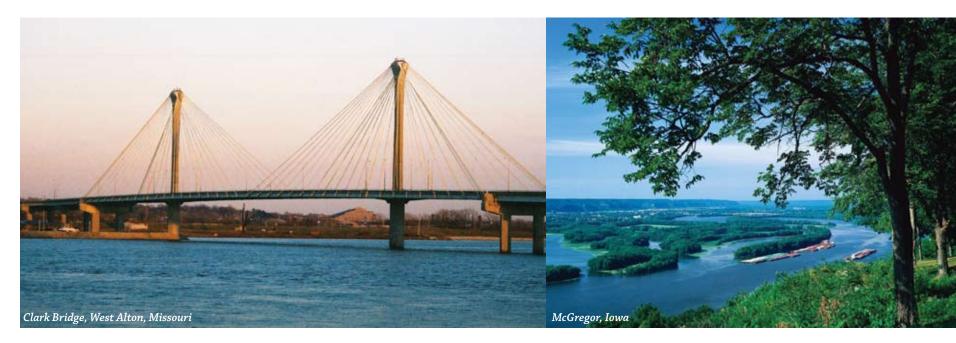
What's your Mississippi? We'd like to share your answer to the question, "My Mississippi is..." in future issues. Email **editor@ourmississippi.org** with a short anecdote about your unique river connection.

This newsletter is a quarterly update of ongoing efforts in the Upper Mississippi River Basin and does not necessarily reflect the views of the U.S. Army.

U.S. Army Corps of Engineers, Rock Island PM-A (Dolan), Clock Tower Building P.O. Box 2004 Rock Island, IL 61204-2004

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HAVE YOUR SAY

At least two major conferences this summer will allow various agencies, organizations and private citizens to come together to help shape the future of the Upper Mississippi River system.

America's Inner Coast Summit, the first of its kind: June 22-24 in St. Louis

America's Inner Coast Summit is the first in a series of meetings designed to collect varied perspectives on the sustainability needs of the Upper Mississippi River system. Organized by the Mississippi Valley Division of the U.S. Army Corps of Engineers in conjunction with the Sand County Foundation, Monsanto, The Nature Conservancy and other sponsors, this first summit session is focused on top leaders from key federal agencies, non-governmental organizations, tribes, industry, the private citizenry, academia and other organizations concerned about the long-term sustainability of the Mississippi River Valley. The Division will use the input generated from the conference to help develop policy recommendations that could shape river-related guidelines, projects and initiatives on the federal, state and local levels.

While this first summit will not be open to the public—and subsequent sessions will—organizers want to gather broad input on the river's future via a Facebook fan page. Find a link to the page at: conference.ifas.ufl.edu/AICS. Anyone interested in the river from an ecological or navigational perspective is encouraged to share thoughts on what's working and what's needed.

This summit builds on similar efforts to strengthen a system-wide approach to sustaining the river, including the recognition of the importance of the Mississippi River and watershed by the Midwest Natural Resources Group. The coalition of 14 federal agencies has adopted a unanimous call for action for sustainable efforts on the Mississippi. The conference also furthers work done by the Visions of a Sustainable River Conference hosted by the National Great Rivers Research and Education Center; The Nature Conservancy's Great Rivers Partnership; and the recently released Mississippi River Commission Vision Statement. Thirty percent of the Mississippi River watershed—the third-largest in the world at 1,250,000 square miles—lies within the confines of the Corps' Mississippi Valley Division.

CONFERENCE.IFAS.UFL.EDU/AICS

Upper Mississippi River Conference: August 26-27 in Moline, Illinois

Anyone involved or interested in the redevelopment of riverfront communities along the Mississippi River is invited to the third annual Upper Mississippi River Conference. The non-profit group River Action, organized to promote the environmental, economic and cultural vitality of the river, is holding the meeting Aug. 26–27 in Moline, Ill. The conference is supported by the U.S. Fish and Wildlife Service, U.S. Coast Guard, U.S. Army Corps of Engineers and other local and regional river partners.

The conference will focus on developing water-fronts in ways that encourage public access and implement watershed-friendly practices, organizers say. Previous seminars covered everything from hydropower to bike paths. And a unique series of "charettes" will allow selected municipalities or organizations to present a project in the works, with attendees helping with related problem-solving. The early registration fee (through Aug. 2) is \$99; a \$25 student rate is also available.

RIVERACTION.ORG