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RIVER TALK

THE MINNESOTA RIVER CURRENT

TRENDING TOWARD THE POSITIVE IN THE MN RIVER BASIN

By Scott Tedrick, Granite Falls Advocate Tribune

It was 1992 that Governor Arne Carlson stood on the banks of the Minnesota River and declared, "Our goal is that within 10 years, our children will be swimming, fishing, picnicking and recreating at this river."

At the time, Scott Kudelka, of the Water Resources Center at Minnesota State University, Mankato, said that such commentary would have brought about laughter by some observers. It was a feat viewed as far too great to accomplish in 100 years, much less than 10.

Nearly 20 years later, the vision, as articulated by Carlson, continues to be a ways from manifesting in its entirety. But at the very least, the idea of a clean Minnesota River is no longer a laughing matter. It is a real possibility, said Kudelka, and the changing mindsets, efforts and river environment are there to prove it.

On August 20th Kudelka was invited to present these changes to the Hawk Creek Watershed board, drawing upon a report he recently collaborated to create known as, "Minnesota River Basin Trends."

Kudelka was joined by Forrest Peterson of the Minnesota Pollution Control Agency (MPCA) and Rhonda Rae, Vice President of Donohue and Associates, the City of Willmar's Engineering firm. The three were in attendance to inform the Hawk Creek board on separate issues, but together they served to detail how past, present, and future efforts have or will come to alter the river environment.

Encompassing 15,000 square miles and stretching across 37 counties, the Minnesota River Basin drains nearly 20 percent of the state. Through it runs 335 miles of the Minnesota River as it meanders from its source in Big Stone Lake to its confluence with the Mississippi at Fort Snelling.

Prior to European settlement Minnesota was home to 18 million acres of wild prairie, 2,000 to 3,000 miles of forest and vast inundations of wetlands. Altering the land for human habitation, industry and agriculture, the state now contains but one percent of the former prairie, 2 percent of the forest and 10 percent of the wetlands.



The Minnesota River

The result is a contrast between \$4.4 billion, or so, in annual agricultural state trade surpluses, and an environment that has been eroded, depleted of wildlife and that in many instances has become toxic. Using federal Clean Water Act's Total Maximum Daily Load (TMDL) program standards, 336

rivers have been designated as impaired waters in the Minnesota River Basin, said Kudelka. The majority of a long list of pollutants have found their way into the river through agriculture, but business and municipal structures such as waste water treatment plants have also played a major role.

Over the years the contaminants have built up to make the Minnesota River unsafe to swim in, the fish ill-advised to eat in large quantities and are causing Lake Pepin, located south of the cities, to accumulate sediment at 10 times its normal rate - amongst other issues.

Continued on page 10

TABLE OF CONTENTS:

- Trending toward the positive in the MN River Basin pg. 1
- Did You Know? 2
- Reflections – Henry Quade 3
- A trip around the world with the paddle and a pack 4
- Working on the Minnesota River. 5
- Water Quality Issues – Pomme de Terre River 6
- Organization Spotlight – Green Corridor Project 7
- Pomme de Terre Mussel Survey. 8
- Book Review 9
- River Ramblings 10
- What’s Happening 11
- Conservation Thoughts 12

DID YOU KNOW?

The nonprofit group, Friends of the Minnesota Valley recently published a guide on conservation restoration work they will be focusing on in the Minnesota River Basin. “Creating a Conservation Legacy: Wildlife Habitat Restoration in the Minnesota River Valley” can be down-loaded at their web site www.friendsofmvalley.org or a hard copy is available by calling 952-881-9065.

This guide provides background information on the basin’s historical habitat, current restoration goals, and planned restoration projects. One potential project will restore 25 acres of wetlands in the Jessenland Unit of the Minnesota River Valley National Wildlife Refuge by breaking drain tile, shallow scraping and constructing earthen dams within drainage ditches. Currently, the Jessenland Unit has a total of 400 acres located in Sibley County near the Minnesota River.

In 2009, the Friends of the Minnesota Valley with support from the Minnesota Environmental Trust Fund restored 192 acres of wildlife habitat in the basin. The organization is planning to restore 135 acres in the coming year by focusing on public and private lands in the Minnesota River Valley National Wildlife Refuge’s Wetland Management District.

According to Lori Nelson, Executive Director of the Friends of the Minnesota Valley, benefits of this restoration work include enhancing the hydrology of wetlands such as shallow lakes for the benefit of wildlife and water quality, retiring agricultural fields to native prairie, removing and managing exotic species, and restoring important floodplain forest communities along the Minnesota River. All of these lands will be permanently protected and open to the public for education, recreation and enjoyment.

River Talk is published quarterly in conjunction with the Minnesota River Watershed Alliance (Watershed Alliance) and partners. Thanks to the Water Resources Center for funding this effort.

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Check out the Watershed Alliance’s web site:
<http://watershedalliance.blogspot.com>





Fish Tales

By Sara Gilbert Frederick, MSUM Today

Carp had been swimming through the depths of Henry Quade’s mind since he first joined the Minnesota State Mankato faculty in 1970. Quade had been thinking about the fish’s introduction to Minnesota lakes, as well as its later removal. He had been thinking about how the popularity of the fish had waxed and waned in the United States and about how it was a prized source of protein in other parts of the world.

But between teaching classes, conducting research and founding and directing the University’s



Water Resource Center, he didn’t have time to catch up with carp until he retired in 2000.

“I always knew I would get back to this carp idea eventually,”

Quade says. “And when you retire, you can do the things you’ve been wanting to do.”

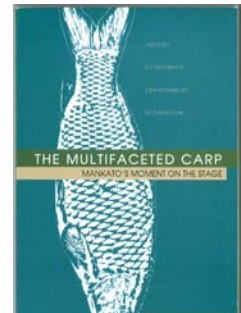
Quade originally approached the subject as the limnologist (one who studies lakes) that he is. He was interested in how the introduction and removal of the fish, which is not native to North America, impacted the nutrient balance of the water. But the more he learned, the more he became intrigued by the fish itself, and by the important role it played in Mankato’s history.

In the early 1940s, a Mankato businessman and former mayor named Armin Kleinschmidt started thinking about the possibility of canning carp. World War II was raging, and the U.S. military needed rations for the troops it was sending around the world. Canned carp, Kleinschmidt surmised, would provide a healthy, protein-rich addition to these rations. And because the Smaller War Plants Corporation was willing to help businesses that might benefit the military get off the ground, Kleinschmidt was able to quickly get technical support for his endeavor. By 1945, he had built a processing plant in Mankato that would eventually be able to can 2,000 pounds of carp per hour.

“This was the first freshwater fish canning plant in the United States,” Quade explains. “Fish canned in Mankato was being shipped to American troops on the Eastern Front and to displaced people in Europe. It was going all over the country and all over the world.”

What Quade found particularly interesting about Kleinschmidt’s venture was the partnership it forged between a local business and the University. Leonard Ford, the head of the Science Department at what was then known as Mankato State College, served as the head chemist for Kleinschmidt’s plant. He hired several of his students to work for him at the plant; at least one of those students, Quade reports, ended up becoming a professor at Minnesota State University, Mankato as well.

The partnership is mimicked, Quade says, in the book *The Multifaceted Carp: Mankato’s Moment on the Stage*. “Fast-forward to the present, and here we have another partnership,” Quade says. “It took a partnership between Minnesota State Mankato and the Blue Earth County Historical Society to get this book created and published.”



The Historical Society published the book and helped provide information to Quade along the way. The University, meanwhile, played an important role in helping gather data for the project. Quade sees great potential for such synergy to be duplicated in the future. “There’s a tremendous opportunity for students and professors to do research here at the Historical Society,” he says. “Further, it’s a great place for retired professors too; many of us live the life of the mind, and the Historical Society provides an environment where we can continue that. There are endless opportunities here.”

Although Quade remains fascinated with carp and its place in the world, he’s already moved on to other writing and research projects. He’s gathering information about railway surgeons for a future book and is hoping to write about the history of the stone industry in Mankato as well. “I have projects that will last me 20 years, if I live that long,” Quade laughs.

Despite his lengthy list of ideas, however, Quade doesn’t hold himself to a strict schedule these days. “It’s not a 24-7 thing for me at this point,” he says. “On sunny days, I get outside and enjoy the day. But on rainy days and in the evenings, I like to have something to sit down and work on. It definitely keeps my mind going.

A TRIP AROUND THE WORLD WITH THE PADDLE AND A PACK

By Scott Tedrick, Granite Falls Advocate Tribune

It's been almost 20 years since Bill Nedderman "dropped out" of society. You'd be hard pressed to find a happier man.

Since age 31 Nedderman has bucked what has become the traditional American way in favor of a life consisting of ever changing scenery with a pack and a paddle.

He has biked, hiked and kayaked much of the world over in North America, South America, Europe and Australia. This past week, 2,100 miles into a journey retracing an old fur trader route that begins in Edmonton and ends in Montreal, he passed through Granite Falls.

Nedderman arrived from Montevideo in a German made collapsible "Klepper" kayak that's "been through hell and half of Georgia" in time for lunch. Intercepted by locals, he graciously accepted an offer of pepperoni from Jimmy's Pizza. There, he ate and socialized heartily, until a phone call from Clean Up the River Environment Executive Director Patrick Moore hastened his pace.

Nedderman had spent the previous evening with Moore following a chance meeting at the CURE office in Montevideo, when the canoe adorning the river advocacy non-profit's exterior perked the kayaker's interest. Upon entering the office, Nedderman recalled that Moore offered to provide him a bed for the evening within five minutes of their introduction, and that the CURE director's gregarious nature made it easy to abide.

Moore was trying to reach Nedderman at Jimmy's on behalf of former Montevideo resident and WCCO reporter John Lauritsen, who wanted to travel from the cities to interview the man. He had heard about the kayaker through CURE's vast network of contacts.

Nedderman intimated that he was neither excited nor affronted by the prospect of a television interview, but he did appear to weigh his time. He had hoped to reach the Skalbekken campgrounds by the day's end, and this would invariably push it, but it seemed important to him to honor the request.

In order to make room for the Advocate Tribune, the interview with the traveler moved from land to river. Kayak-to-kayak from downtown Granite

Falls to the Minnesota Falls dam, Nedderman shared a little of his story.

Having paddled from Rocky Mountain House near Edmonton, through Lake Winnipeg and up the Red River on his own for the past three-or-so months you'd expect Nedderman to be a little socially awkward. Discovering that he has not owned a car, television or health insurance for the past 19 years, only reinforces the presumption. In reality, Nedderman's affable manner makes it easier to relate to him than most.

His upbringing was quite typical. Raised in Iowa, Nedderman recalls his earliest travels being with his family. Along with his two brothers and sister, he took road trips to see the likes of Niagara Falls, Washington D.C. and Disney World. He

thinks it was there that he may have first gotten the travel bug, but he can't explain why his siblings turned out "normal," each with a pair of children and living happily in the "civilian world."

Nedderman completed high school and went on to serve in the Iowa National

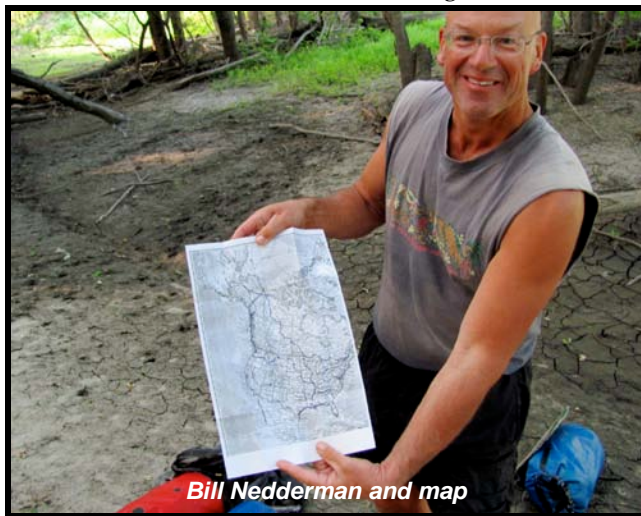
Guard. The guard was a weekend gig where he worked with telephone systems. He turned his training with the outfit into 10 years of employment, installing business communication systems for an assortment of phone companies.

With some savings and a few trips under his belt, it was 1991 when his curiosity, the end of a long relationship and the banality of his job spurred him on to greater adventure. On a relative whim he chartered a plane to New Zealand and Australia where he spent six months apiece hiking and bicycling.

The plan was originally to travel for 10 straight years, but nineteen years later and fit as a fiddle at age fifty, he says he can't say when he'll stop.

"It was a 'the more you see the more you want to see' type thing, said Nedderman. "I try to make life interesting, have fun and I like to see things. I'm a very curious person."

Over the years Nedderman has traversed the Appalachian, Pacific Crest and Continental Divide Trails, completing what is known as the



Continued on page 9



Targeted conservation effort help clean up state's namesake waterway.

By Tom Cheroeny, West Central Tribune

A couple of years ago, a group of paddlers made their way down the Minnesota River as the creeks and tributaries churned and gushed with chocolate-colored waters heavy with the soil washed from upstream fields by a spring rain.

With one exception: As they reached the mouth of Beaver Creek, the paddlers were struck by the clarity of the waters it delivered to the Minnesota River.

What was going on?

The same thing could be going on throughout the Minnesota River watershed, a point made to over 50 people who paddled the Minnesota River as

guests of the Renville Soil and Water Conservation District on July 21. The guests were members of the Lessard-Sams Outdoor Heritage Council, the Legislative Citizen Commission on Minnesota Resources, the Clean Water Council, the Board of Water and Soil Resources, Departments of Natural Resources and Agriculture, and Minnesota state legislators. They are responsible for recommending, deciding or overseeing how millions of dollars in Legacy and lottery revenues will be spent to preserve and protect the outdoors.

"We are starting to see a difference here," said Cory Netland, director of the Hawk Creek Watershed Project, as he stood before the guests along Renville County Ditch 37, the start of the Beaver Creek watershed.

They found that past conservation efforts to plant grass buffers in riparian areas, as well as in ravines and erosion-prone areas, had been successful in reducing sediment loads by more than 50 percent in the watershed.

The point is, when you target it in the right areas it can make a difference," said Netland, as he and the guests stood on a grassy buffer alongside the ditch.

Overall, some 5,480 acres or 4.5 percent of the lands in the watershed are enrolled in conservation programs. Other grass-covered lands bring to 7,480 acres the total of perennial cover in the watershed, or 6.1 percent of the total land mass, according to Netland.

This sort of success story could be duplicated throughout the agricultural lands of the Minnesota River basin, according to Tom Kalahar, a 31-year-veteran of Renville County's conservation efforts through its SWCD.



Renville County is number one in the state when it comes to producing corn and other row crops, but it also is a leader in the state when it comes to enrolling lands in perpetual conservation easements, said Kalahar.

He told the visitors that farmers are willing participants in programs that benefit water quality. The programs must be the equal of the economic realities that farmers face, and there needs to be many different options to match the varied needs of producers, he said.

"We work this landscape hard," said Kalahar, pointing to shoulder-high rows of corn that filled fields right to the edge of the public right-of-way. Kalahar told the visitors that 85 percent of the land in Renville County was classified as wetland soils before the arrival of agriculture. A mosaic of seasonal and shallow wetlands, and prairie covered the entire county.

Today, about 99 percent of the grasslands and nearly as large a percentage of the wetlands are gone, noted Kalahar. Restoring a small percentage of each, in the right places, can improve the river while also benefitting our agricultural economy, he told the guests.

Continued on page 10



Pomme de Terre near Appleton may be rechanneled

By Judy Swenson, Montevideo American News

Those who enjoy fishing on the Pomme de Terre River may find more fish are biting in the coming years.

The U.S. Army Corps of Engineers and the Minnesota Department of Natural Resources (DNR) are conducting a study (Marsh Lake Aquatic Ecosystem Restoration Feasibility Study) which will be completed this year.

The objective of the study, which began in May 2007, is to improve the habitat in the watershed for fish and other aquatic wildlife. It is part of the Corps’ ultimate goal of improving the health of all of Minnesota’s main watersheds.

Marsh Lake is on the Minnesota River between Swift and Lac qui Parle counties near Appleton. The Marsh Lake Dam is owned and maintained by the Corps of Engineers.

“The project if approved, would be accomplished primarily through the modification of the Marsh Lake Dam and restoration of the historic path of the Pomme de Terre River to Lac qui Parle Lake,” said John Schladweiler with the division of Ecological Resources for the Minnesota DNR.

Marsh Lake Dam was built in the late 1930s and Pomme de Terre River was rerouted into a separate reservoir - Marsh Lake. The Corps of Engineers modified the dam in the 1940s as part of the Lac qui Parle flood risk management project.

But in recent years, when high water and flooding occur, the Marsh Lake Dam overflows with water from Lac qui Parle Lake, and does not serve as a significant means of flood management.

The study team assigned to the Marsh Lake project believes that modifications in the vicinity of the dam and Marsh Lake are critical to restoring more natural habitat conditions.

Corps of Engineers project manager Mike Wyatt said rerouting the Pomme de Terre would reduce sedimentation (turbidity) and provide additional fish habitat. Excess sediment in water leads to impaired habitat for aquatic life, decreased photosynthetic activity and reduced recreational quality.

He described some of the actions being considered, like modifying the dam to create a fish passage and a series of rock steps going up and over the dam to slow down the velocity of the water and allow fish to get up into the lake.

They are proposing to create another section of the dam that would serve as a draw down structure.

“We would pull out stop logs once every three years or so and actually draw down the lake to get all the water out,” said Wyatt.

“If water is drawn out regularly, light will be able to hit areas of the lake that it doesn’t normally reach. That light will help stimulate plant growth which will help stabilize the bottom sediments and reduce turbidity.

Wyatt said they would also like to add small islands throughout the lake which would cut down on fetch (air mass) and reduce the size of the waves which stir up sediment.

“Because Marsh Lake is so wide, long and shallow, only 3 to 5 feet, when wind blows across at only about 10 to 12 mph it creates waves that resuspend the sediment,” said Wyatt.



“Islands would cut down the fetch and stop the wave, which will stabilize sediments and also help the plants to grow.”

Another small part of the project they hope to accomplish will be reconnecting to the river an abandoned fish pond on the downstream side of the dam.

All of these measures are dependent upon whether or not the project is approved,” Wyatt explained.

Public meetings will be held in the area of the project prior to study reviews in order to obtain public input and present those findings in the report.

The final review will be a presentation of the study team’s findings to the Civil Works Review Board (the overseeing body of the Corps of Engineers) in Washington D.C.

If they approve the report it will be submitted to the assistant secretary of the Army, and after that to the president’s office of management and budget. They submit it to Congress for funding.

If the project is approved, the next phase would be pre-construction and design which takes about a year. After that, construction would begin. The estimated cost is \$14 million. The DNR would pay 35 percent and the Corps 65 percent.

For more information on this project go to page 8: “Pomme de Terre Mussel Survey.”



Green Corridor getting \$2 million

By Troy Krause, Editor; Redwood Falls Gazette

Along the area known as the Mid-Minnesota River Valley, the area which stretches from the Upper Sioux Agency State Park near Granite Falls to Fort Ridgeley State Park near Fairfax, there are valuable resources of a cultural, recreational and scientific nature. Those acres have been targeted by a group of area individuals known as Green Corridor, Inc. which has as its mission to create a “legacy of connectivity, habitat viability and public access within the Mid-Minnesota River Watershed.”

Achieving that mission was made easier recently, as the Legislative-Citizens Commission on Minnesota Resources (LCCMR) approved a recommendation to allocate \$2 million to Green Corridor, Inc. for projects it hopes to accomplish.

The proposed funding allocation was part of a larger recommendation from the LCCMR. That



proposal would fund millions of dollars of projects focusing on the state’s environment and natural resources. The recommendation is made annually for the Minnesota legislature, with the

funds primarily coming from the Environment and Natural Resources Trust Fund, which is funded by state lottery proceeds.

While the Green Corridor, Inc. group has received funding from LCCMR in the past to conduct studies and to acquire lands from willing landowners, the request it made in 2010 was something a little different, although it still fits within the mission of the entity. According to Brad Cobb, Green Corridor, Inc. program manager, the funds allocated are going to be used to create what are known as scientific and natural areas (SNA) sites in the designated area of the river valley.

According to Peggy Booth, DNR SNA program supervisor, an SNA is one type of land designation in the overall state outdoor recreation system. There are also wild-life management areas (WMA) and aquatic management areas (AMA) and

even native prairie bank conservation easements.

What distinguishes an SNA is the value that land offers to science, Booth, who is working with Green Corridor leaders as it begins planning the next steps in getting Mid-Minnesota River Valley land into the state’s SNA program.

The majority of the land that would be placed into an SNA designation is already been defined based on a comprehensive document called the Minnesota Biological Survey.

That survey, commissioned by the DNR, includes lands deemed worth of SNA designation, and helps to prioritize those lands based on the important items in those areas.

“The purpose of a scientific and natural area is to protect the natural features in it,” said Booth, adding they typically have rare or endangered species that have been discovered in them.

With the very rare exception, SNA lands are open to the public, and Booth said 88 percent of the 152 SNAs currently designated are open to some form of hunting.

There are SNAs in the Green Corridor, including land near Franklin known as Cedar Mountain.

Booth said working with Green Corridor leaders provides a unique opportunity for the DNR, as it gives them more of a local connection with prospective land owners who may be interested in selling their land.

According to Cobb, land in an SNA is designated in perpetuity, and the responsibility for maintaining that land falls in the jurisdiction of the DNR.

Cobb said developing SNA lands has always been in the back of the minds of Green Corridor leadership, adding it all fits into the mission of the Green Corridor.

The allocation, if approved by the state legislature, would begin in July 2011 and would continue through June 2012. Cobb added, however, it may take a bit longer than that to complete the work.

Much of the effort in getting to the point of requesting funds from the LCCMR was based on a study the Green Corridor began in 2008. That study created a blueprint for the Green Corridor designated area, and funds also from the LCCMR were also allocated to conduct that study.

The blueprint, said Cobb, creates an overarching plan for the river valley as it creates recreational opportunities, as well as integrating the human and cultural history of the area into future planning for the corridor.

The Green Corridor has also submitted a request for legacy amendment funds for land acquisition and restoration in the amount of \$6.4 million in the targeted corridor area.

POMME DE TERRE MUSSEL SURVEY

By Judy Swenson, Montevideo American News

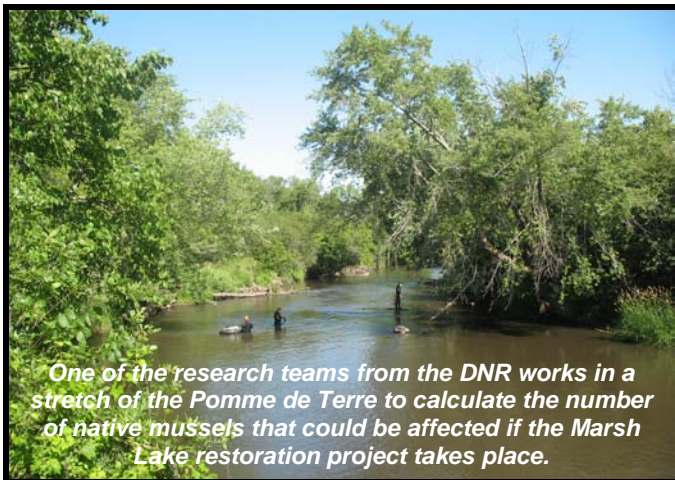
Research teams from the Department of Natural Resources (DNR) were working in the Pomme de Terre River near Appleton at the beginning of the month (July), estimating native mussel populations in the reach of the river that would be cut off if the Marsh Lake Aquatic Ecosystem Restoration project is approved.

Team leader Bernard Sietman, a malacologist (mollusk biologist) said “We are trying to get more detailed information to determine the impact on native mussels the channel reconnection could have. We need to find out how many mussels will be affected.”

Native mussels are an important factor in determining and maintaining the health of streams, rivers and lakes. They are biological indicators of aquatic health because of their sensitivity to habitat degradation.

Freshwater mussels clean the water during their feeding process; provide food for fish and mammals; provide substrate and nutrients for algae and invertebrates; and stabilize the lake and stream sediments.

Sietman said, “Some mussels will die, perhaps a large percentage. But the premise is that you’re going to double the number of river miles which will increase the river habitat, and in principal that would double the number of miles for the native mussels to live after they start recolonizing in the new reach of the river.”



One of the research teams from the DNR works in a stretch of the Pomme de Terre to calculate the number of native mussels that could be affected if the Marsh Lake restoration project takes place.

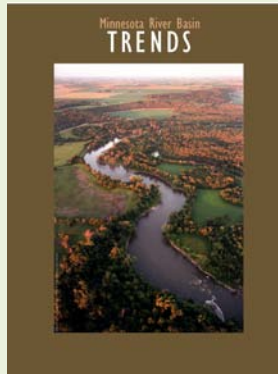
He said that if the project takes place, the DNR will closely monitor how well and how quickly the native mussel’s recolonize.

“It could start happening right away, or it could take years,” he said. “We don’t know how long it takes mussels to recolonize. I don’t know of any study in the country that has monitored the rate of mussel recolonization.

Trending toward the positive continued

But as Kudelka pointed out, efforts to mitigate pollutants and protect sensitive habitats have come a long way since the earlier portion of last century, and particularly since the 1970s when Agricultural Secretary Earl “get big or get out” Butz, oversaw a philosophy of farming ‘fence row to fence row.’

Kudelka said that recent data compiled from 1999-2006 show that streams within the Minnesota River Basin are increasing in water clarity due to the adoption of such policies as Best Management Practices (BMPs) and conservation easements. From 1998 to 2002 alone, Kudelka said 100,000 acres have been enrolled in the Conservation Reserve Easement Program, which retires critically sensitive land permanently. “I would call the CREP program probably the biggest success story,” he said.



In addition to improvements in the agricultural realm, Kudelka pointed out that upgrades to the majority of the Minnesota River Basin’s 152 water treatment plants have cut phosphorus, which create algae blooms detrimental to fish habitats, by nearly 40% from 2005 to 2008.

The increase in animal habitat and decrease in run-off from programs like CREP, combined with chemical reductions such as phosphorus, are permitting the resurgence of the number and variety of fish found in the river while also facilitating a return of ducks, otters, pheasants and eagles in the watershed habitat.

Utilizing information gathered from river surveys, Kudelka stated that the types of fish found in the Minnesota increased from 54 in the early 80s to 60 in 2005.

In example, he pointed out that “Blue Sucker fish needs clean water to reproduce, recently it has been reproducing in the Minnesota River for the first time in forty years.”

Eagles are another success story. With the restoration of the river valley habitat, the birds have increased the number of nests from approximately 100 in the early 70s to nearly a thousand today.

Still striving to build critical mass, the Minnesota River Watershed remains severely impaired, but is also becoming a burgeoning success story. It may be another 20 years before the river is again safe to swim in, but the evidence indicates that efforts are moving the environment in a positive direction.

A trip from around world continued from page 4

Triple Crown in the hiking world. He is only one of two people known to have completed them three different times.

He has kayaked the Yukon passage 2,000 miles to the Bearing Sea, hiked through Patagonia of Argentina and Chile and bicycled from Germany all the way to North Cape Norway before turning around pedaling to the Strait of Gibraltar.

In sum he has bicycled 63,000 miles, hiked 32,000 and kayaked 24,902. Upon reaching Breckenridge Minnesota he said he had paddled the equivalent of the circumference of the earth.

At times he has been accompanied by a woman. For 12 years a tough German by the name of Ursula bore some of the roughest terrains and most stunning beauty by Nedderman's side. The two spent the summers traveling together, and he gave credit to her for sticking it out as long as she did before finally opting for a traditional life.

There have been a few other women here and there, but whether alone or as a duo, Nedderman hasn't slowed down. Eight to nine months of the year are spent travelling. In the winter months he returns to his home, a 12 x 16 log cabin in the 500-plus town of Lovilia, Iowa where 30 acres of timber keep the quarters warm and cozy.

Over those three or so months he visits family, enjoys carpentry work, reads and ponders over future trips. He says he often takes in material that inspires him. His biggest inspiration is Verlen Krueger who paddled over 100,000 miles despite only beginning to kayak in his 40s.

"He travels twice as far as I do in a day and calls it fun," he quipped. Looking to the present, Nedderman is only about half-way to his Montreal destination. He's unsure whether he can complete the paddle down the Minnesota River, up the the St. Croix River and over Lake Superior before the weather turns. While he prefers to meet the goal, he says he's comfortable if he does not. He will simply start where he left off next year.

Standing in front of WCCO's Lauritsen below the Minnesota Falls dam, Nedderman in the midst of his first television interview.

Lauritsen asks the hows and the whys, and is looking for a way to connect the kayaker to environmental issues. Nedderman says, of course he wants clean water, but admits that advocacy is not his thing. In all his years his trip has never been about a message. Really he's just a guy successfully doing what he loves to do in life, regardless of societal norms.

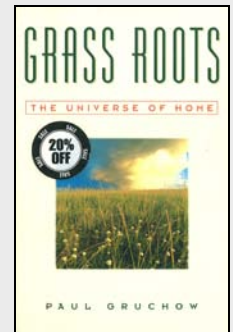
It may not provide the answer most of us expected, but he seems to have found the one most of us are looking for.

Book Review: Grass Roots – The Universe of Home by Paul Gruchow

Again, I lived along the riverbanks where beaver built their dams; mud turtles sunned on half-submerged logs; bullheads and northern pike, saugers and buffalo fish swam the murky waters; white-tailed deer came down to drink; the tracks of mink mingled in the shoreline mud with the remains of the deer-toe clams they had fished from the shallows.

But mainly I dwelled along the river under the spell of its mysterious waters, which ran to the Minnesota River, then into the Mississippi River, then down the central nervous cord of the continent, over the plains of Iowa, through the hills of Missouri and Arkansas, across the bayous of Louisiana, and into the Gulf of Mexico.

In the tradition of Wendell Berry and Rachel Carson, Paul Gruchow writes of the world as home. Throughout Grass Roots Gruchow masterfully reveals the heart of rural America. Reviews of Gruchow's previous book The Necessity of Empty Places praised his environmental writing.



When I sat on the overhanging limb of a willow tree dangling my bare feet into the brown Chippewa River, feeling my bare feet into the brown Chippewa River, feeling the slow, steady tug of its unfailing current against my toes, I became connected to the great body of the continent. I was linked not merely with a small river in western Minnesota but swept up into the gigantic stream of life.

There is something exalted about this new self-image, too. With every downward revision in our estimate of ourselves, we have more clearly seen ourselves to be participants in a universe infinitely complex and intertwined. What we have sacrificed in pretension, we have more than gained in intimacy with a place ever more astonishingly grand. It is an ancient principle of spirituality that whoever would be exalted must first be humbled. We feel the truth of that insight now more keenly than ever as we prepare to step from the limbo of eternity into the vast wonder of time.

For me, the most important place on the farm was the cattail marsh at its north end. To get there, you took the farm's interior road, a grass track that ran east to the edge of the maple grove and then north as far as the waterway that drained the slough from the east. The physical distance was not quite half a mile, but so far as I was concerned it might have been halfway around the world.

Here was a piece of Rosewood Township as it had existed for thousands of years, a surviving testament to the tallgrass prairie, and the richest and most complex representative of it.



The end of summer is charging straight into autumn, one of my favorite seasons (winter still wins out for me) and a relief from the sticky and oppressive humidity and temperatures. At times it felt like we were living in southern Iowa. This type of weather and all the rain has made the corn happy as farmers look to a bumper crop - maybe one for the record.

Excessive moisture also kept most of the rivers running higher than normal and a chance to paddle far into the summer, unlike last year. In July my brother Brian and I paddled the Maple and Le Sueur rivers right after a major rain storm. Although you really couldn't say we were paddling, mostly steering around large trees that had fallen into the river. The current was moving extremely fast as Brian found out when he got too close to a large maple tree lying across the channel.

I had the privilege to be part of the Minnesota River Tour sponsored by the Renville SWCD to show members of the Legislative-Citizen Commission on Minnesota Resources (LCCMR), Clean Water Council and Lessard-Sams Outdoor Heritage Council what is happening in the basin when it comes to conservation practices and water quality improvements. Tom, Karen and the gang did a great job with the tour and should be proud at how well it went.

Summer for me meant a chance to explore a large chunk of the Minnesota River Basin starting up in the Twin Cities and going all the way over to Lac qui Parle County. I spent three days getting a close up view of projects that have made a difference in water quality while shooting photos for the Minnesota River Basin Progress Report. If you haven't got a chance to see a different part of the basin I would highly recommend it. This really showed the diversity of the basin and what it has to offer for anyone interested in the natural resources side of life.



On Labor Day I went out for a paddle on the Swan Lake (near Nicollet) for the first time. As one of the largest wetland complexes in the state this area produces and provides a home to a large number of waterfowl. My friend Pat Kunerth got me out on the lake for a relaxing and joyful afternoon of experiencing what the Minnesota River Basin once looked like. I came away thinking how fortunate we are to be living here and the opportunities for adventure are everywhere. The unique thing about the Minnesota River Basin is how easy you can get away from the crowds.

Targeted conservation efforts continued

"We cannot fix that (the river) without fixing this to some degree," he said, pointing to another riparian area where corn was growing right to the very edge of a steeply-banked portion of the ditch.

The visitors to Renville County said they were impressed by the trip down the Minnesota River. They were equally impressed by the improvements that conservation programs - in particular the Conservation Reserve Enhancement Program or CREP - have already made possible. They heard lots of support for continuing to move forward in protecting what is considered the most important natural resource in the southern half of the state.

"We cannot express to you how important we think the Minnesota River Valley is," said Gene Jeseritz, DNR fisheries, while addressing the group.





WHAT'S HAPPENING

The end of the BNC Water Quality Board

On December 31, 2010, the Brown Nicollet Cottonwood (BNC) Water Quality Joint Powers Board will become inactive after being formed in January of 1992 to tackle groundwater issues. The Board had to eliminate the two remaining water quality staff positions when the Middle Minnesota River Watershed Clean Water Partnership Implementation Project ended on June 30, 2010.

The BNC Board achieved a lot of success when it came to conservation practices and improving water quality. Approximately 5,200 acres were enrolled in CREP; the enrollment of 11,330 acres into CRP; installation of 100 rock tile intakes; along with the other Best Management Practices like terraces, grass waterways, water and sediment control basins and grade stabilization structures.

Minnesota River Board Awards

The Minnesota River Board presented two awards to Senator Dennis Fredrickson and Scott Sparlin respectfully at their annual meeting on July 19th in New Ulm. Senator Fredrickson received the Confluence Award for his environmental advocacy while serving as a state senator for thirty years. "Senator Fredrickson's leadership and influence has demonstrated to local government units and state organizations that it is possible to utilize common sense to balance economic needs and environmental concerns," stated Commissioner John Schueller of Redwood County.

The Minnesota River Board presented the Tributary Award to Scott Sparlin of New Ulm. According to Shannon Fisher, Executive Director, Scott



Scott Sparlin receives award

Sparlin has been a long-time advocate of the Minnesota River serving as the only Executive Director of the Coalition for a Clean Minnesota River (CCMR), first Watershed Initiative Director

for the Friends of the Minnesota Valley and on the Minnesota River Citizens' Advisory Committee. Scott has been active in promoting conservation drainage, community cleanups, habitat restoration, and environmentally friendly land use practices.

Jennie Lake Wetland Rehabilitation

Jennie Lake south of Brandon has a new pump structure designed, engineered and installed by Ducks Unlimited (DU) to enhance this waterbody. Located in the Chippewa River Watershed, water levels on Jennie Lake will be temporary drawn down to kill off undesirable fish and allow for new growth of aquatic plants and invertebrates. In addition to Ducks Unlimited, the project involves the Minnesota DNR, Chain of Lakes DU Chapter, Viking Sportsmen, Pioneer Heritage Conservation Trust, Chippewa River Watershed Improvement Project, Outdoor Heritage Fund and North American Wetlands Conservation Act.



Volunteers of the Chain of Lakes Ducks Unlimited chapter recently toured a wetland project on Jennie Lake near Brandon.

Cost Share for Chippewa River Watershed

A Minnesota Clean Watershed Partnership grant will provide \$347,833 for the installation of Best Management Practices (BMPs) and \$200,000 in low interest loans for upgrading septic systems in Dry Weather, Lines and Spring creeks sub-basins of the Chippewa River Watershed. The funds will be managed by the Chippewa River Watershed Project to help with buffer strips, critical tree plantings, conservation management systems, streambank stabilization projects and other BMPs.

Xcel Energy to remove coal ash ponds

In 1995, Northern States Power shut down operations at its coal plant outside of Granite Falls. Xcel Energy is the current owner and has initiated a pilot process to clean up four containment ponds next to the plant.

Two ponds installed in 1950 contain 12,000 cubic yards and two other ponds built in 1975 have 10,800 cubic yards of coal



Photo from Granite Falls Advocate

ash. According to the project manager Darin Schottler, Xcel Energy decided to clean up the ponds after the company came to the conclusion that coal wouldn't be burnt here again and the growing likelihood that coal ash will be regulated at the federal level.



Mankato Free Press – Our View: Good Work - the river is healthier

In many ways, the ongoing restoration of the Minnesota River Basin is a story of success. The water is less polluted, animals and aquatic organisms are seeing an encouraging rebound and appreciation for the value of the river continues to grow.

A new “state of the river” report from the Water Resources Center at MSU and the MPCA gives a look at some of the most important trends in the basin. With some significant exceptions, the trends are something to cheer.

A big rebound in the fish population has been one of the more obvious success stories. Anglers will attest that there are more fish and more species of fish. Mussel numbers, too, have improved although not to the extent of the resurgence of the fish.

The return of one animal in particular – the otter – is certain to bring enjoyment and encouragement to those in the river valley. Wiped out by pollution and trapping early in the last century, the re-introduced otter population is steadily making the river and its tributaries home.

For most people, seeing the playful otters is a site matched perhaps only by the now common sight of bald eagles.

Stricter state regulations have led to phosphorus levels dropping significantly. Cities across the basin have built new treatment plants that discharge a fraction of the phosphorus of the old plants. A ban on phosphorus in lawn fertilizer has further helped. It attests to the value of targeted and sensible regulation accompanied by the financial assistance needed to meet goals.

Not everything has shown improvement. Nitrate levels are still a concern and the pressure of development and farming has a growing impact on the rivers.

Being in the midst of some of the richest farmland in the country brings special challenges. Increased farmland drainage the past decade or so appears to have brought one of the biggest new challenges to the basin. Water from millions of acres of land is rushing too fast to the rivers, bringing increased erosion, pollution and flooding threats.

Those new problems, like the past ones, can be improved with dedication, reasonable regulation, technological advances and public support.

That public support is easier to get these days. That, perhaps, is one of the biggest successes in our valley: a renewed appreciation for the value and beauty of the Minnesota River.

From the Mankato Free Press Editorial Page on January 18, 2010.

The mission of the MINNESOTA RIVER WATERSHED ALLIANCE (Watershed Alliance):

The Watershed Alliance is a network of citizens, public agencies and private organizations that communicate the benefits of an ecologically healthy Minnesota River Watershed to others and who actively work towards its improvement and protection.



Questions and comments on the River Talk newsletter can be directed to: Scott Kudelka; Water Resources Center; 184 Trafton Science Center S; Mankato, MN 56001; 507-389-2304 or scott.kudelka@mnsu.edu