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RIVER TALK

THE MINNESOTA RIVER CURRENT

STATE SENATOR DENNIS FREDRICKSON TO RETIRE AFTER 30 YEARS

One of the most respected champions of protecting and restoring the environment decided to call it a day after thirty years of faithful service in the Minnesota Senate. Dennis Fredrickson of New Ulm announced an end to his productive and admired legislative career by not running in November to be elected for a 10th term.

Senator Fredrickson is respected on both sides of political spectrum for his ability to work across party lines and push for what's right when it comes to managing our natural resources. As the chief Senate sponsor of the Clean Water Legacy Act, this retired farmer saw the need for the state to evaluate all of its lakes and rivers along with deciding how to improve water quality in any impaired or polluted waterbodies.

In 2008, Fredrickson became one of the more outspoken advocates behind the Clean Water, Land and Legacy Act supported by a majority of the voters. This constitutional amendment will dedicate a percentage of the sales tax to fund projects and programs in the fields of outdoors, arts, culture and water.



What is happening in the Minnesota River has always been of a focus point for Senator Fredrickson with his district starting in New Ulm and ending at Marshall. He helped secure state funding as part of the Conservation Reserve Enhancement Program and joint-effort between the Federal Government, Minnesota and local partners to enroll just over 100,000 acres of critically sensitive cropland into permanent easements. Converted back to trees or prairie grass has resulted in the improvement of water quality on the Minnesota River.

At 70 years old, Fredrickson felt the need to spend more time around home and be more part of the lives of his grandchildren. He is looking forward to pursuing his favorite hobbies of fishing, hunting and paddling. Over the years, Dennis has taken a special interest in the state's rivers especially the ones found in the Minnesota River Basin. As a senator he helped sponsor the designation of water trails including the Redwood, Cottonwood and Pomme de Terre. The State Water trail Program provides access and other facilities for the public to use.

During the past thirty years, a diverse selection of organization recognized Senator Fredrickson many times for his environmental stewardship and political leadership. Awards have come the Minnesota Association of Soil and Water Conservation Districts (MASWCD) Legislator of the Year, Minnesota Chapter of Ducks Unlimited and the Fish and Wildlife Legislative Association. Dennis served for 30 years on the Senate Environment and Natural Resources Committee and 20 years on the Legislative-Citizen Commission on Minnesota Resources.

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DID YOU KNOW?

Over 200 Best Management Practices (BMPs) have been installed under the Scott County Cost Share and Incentive Project. Started in 2006, the project has prevented 5,275 tons of sediment and 7,380 pounds of phosphorus from flowing into lakes, rivers and other waterbodies in Scott County on an annual basis.

The main focus of this project is to encourage landowners to make wise stewardship decisions by reducing or removing barriers. On the financial side of the project, funds were secured from the Scott Watershed Management Organization and local project participants to supplement state and federal monies. More than \$2.75 million has been leveraged to assist landowners with the installation of conservation practices.

BMPs were promoted by local conservation experts working with landowners to provide them an understanding of available programs along with technical support. The project also utilized new scientific information to target those BMPs and areas that would have the most effect on improving water quality in Scott County.

The Scott County Cost Share and Incentive Project has been declared a finalist for the 2010 Environmental Initiative awards. The Minnesota Environmental Initiative honors projects that have achieved extraordinary outcomes for Minnesota's environment by harnessing the power of partnership. Award winners will be honored at the May 27th Environmental Initiative Awards dinner.

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

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Check out the Watershed Alliance's web site:

<http://watershedalliance.blogspot.com>





Chris Domeier was involved with replacing the low-head dam at Dawson in southwestern Minnesota with a rock ramp. The goals of this project were to provide fish passage and habitat along with improving safety by eliminating the hydraulic roller created by the dam. Built in 1913, the original purpose of the dam was to provide water for the City of Dawson.

What are the benefits of removing a dam like this?

The first one I always give people is safety. This dam never drowned anybody, but many other dams in Minnesota have drowned people. All these dams have this hydraulic roller which people don't understand how dangerous this can be unless you show them a video or explain how you've got no chance if you get pulled in, you are going to drown, or be beat up pretty bad.

As a fisheries biologist we are always looking at fish, and fish passage. The other idea is we want fish passage up the whole river, all the way to Gary, South Dakota. Now the fish can get up to spawning habitats, to open up about 60 miles of stream that were cut off by the dam. We are going to have a lot of fish that use this site for just reproduction, and for nursery habitats and year round habitats.

What's the purpose of using boulders?

They are called rock weirs, creating resting pools for fish as they migrate upstream. There is about 4% grade for 300 feet allowing the fish to shoot through at short bursts, giving them spots to stop and rest. There is a lot of dead water in these pools, even though they look pretty violent, there is a lot of calm areas. The fish can swim into one, rest, swim to the next one, rest, and just keeping moving through it.

What will be one positive change of this project?

One of my biggest pleasures is getting people down here to use the river. It wasn't a good environment for fishing. We put a lot of fishing boulders in, to get them down and stand in good spots, so it will be easy access instead of having to climb across broken concrete. We put a fishing box down there actually, a platform, that's going to be handicap accessible.

How about for paddling?

It will depend on the flow. You can be a novice and get by with it, if you tipped over you could stand up out there in all these ruffles. When we get higher flows you should

know what you're doing. If you come through it, it's like anything else. You could tip over wearing a life jacket and get washed through. There will be those back eddies that will actually bring you back to shore. It shouldn't really be dangerous, as long as you don't have a novice coming through with a flood flow. I think anyone with medium experience should be able to canoe or kayak through it if they want. We are going to have a portage set up to go around the set of rock weirs.

What has been the public interest in this project?

This has been a major tourist attraction in town during the construction phase. Its good though because it's kind of neat stuff. People don't really envision this big equipment walking around in the river where there used to be 5, 6 feet of silt. You don't envision them putting rock down and to move around and drive around. There have been a lot of people watching. A lot of older guys stop by and chat about how things used to be, and how they used to swim down there, and stuff like that.

How has the public support been?

I think the community support has been pretty good. We had three different city council votes to get the project approved with all of them animous except for one. There were definitely people against it. I think a lot of those people have changed their minds once they have seen what we were doing. A lot of it is learning, what are you really doing, and how will it affect us.

What was the sediment build-up like?

I think we cut about 4,000 cubic yards of material out that was here. There was accumulated silt that had come down over the years and just settled. The reservoir was basically at an equilibrium point. It wasn't extremely full of sediment. The channel was so entrenched it kept itself cleaned out during high flows. That cut was taken out and hauled out to a disposal site. On the upstream end there is about 3 feet of that sediment left, underneath 3 feet of rock, large fieldstone rock. We drove across this with our heavy equipment numerous times, and this is as packed and as solid as it can get.



HEAVY SNOW LEADS TO STINKY MESS ON SW MINN. LAKES

By Mark Stell, Minnesota Public Radio

Even though the grass is turning green, there are still reminders of this year's tough winter. The latest appeared amid breaking ice on southern Minnesota lakes: lots of dead fish.

Thousands of dead fish – mostly dead carp weighing up to 20 pounds – float in a bay on Lake Shetek, packed in by the wind. Even fin to fin, they cover an area that is easily the size of a football field. A crew of more than 30 volunteers is picking them up with pitchforks.

"It's not probably the most pleasant work; it's kind of smelly," volunteer organizer Mark Slettum said. "But I think we all believe that we're caretakers of the lake and we certainly want to give back to it by cleaning it up and kind of being the custodians of the lake."

The smell of rotting fish fills the air. One by one, volunteers toss the carcasses into trailers and the buckets of front end loaders.

They land with a squishy plop.

Heavy snows this winter were the main factor in the fish kill, as more than two feet of snow covered the ice on Lake Shetek. That prevented sunlight from reaching lake vegetation, which practically shut down oxygen producing photosynthesis in the water. As a result, the fish suffocated.

"There's spots like this all around the lake, I guess," said Jerome Barstad, a volunteer who is picking up dead fish. "This isn't the only side."

Barstad, who has been working since the weekend, said the fish kill is the worst at Lake Shetek in almost 60 years.

According to the Minnesota Department of Natural Resources, roughly 10,000 fish died last winter, with a total weight around 40,000 pounds, but that's a very preliminary estimate.

"We worked two hours over there at the marina Saturday," Barstad said. "We figured there was about 10,000 pounds on about 150 feet of shoreline."

The problem is more widespread than just Lake Shetek. Other lakes in southwestern Minnesota lakes also had heavy winter kills, said Ryan Doorenbos, fisheries supervisor at the DNR's Windom office.

They include East Stay Lake in Lincoln County, St. James Lake in Watonwan County and Buffalo Lake just east of Lake Shetek in Murray County. Doorenbos said the heavy winter snow prevented efforts to help fish survive the winter.

Wildlife groups often install winter aeration systems on shallow southern Minnesota lakes to artificially enrich oxygen levels in the water.

Doorenbos said many aeration systems were installed late or not at all because workers couldn't get the ice to install them. As late as January, the aeration crews were finding that the heavy snow had functioned as insulation and

prevented ice from growing thick enough, he said.

"They were still finding only a few inches of ice and they felt that they weren't comfortable putting these systems out because it was a safety issue," Doorenbos said.

But even if all the aerators had been installed on time there still would have been winter kill. During severe winters like the one just ended,

aerators can reduce fish kills, but not prevent them, Doorenbos said.

The fish scooped up at Lake Shetek are being hauled out to a nearby farm. John Nelson, who owns the land, drove a tractor to pull a wagon full of dead fish to the dump site.

"This is a monumental fish kill," Nelson said. "The reason I'm involved is it's everybody's water. And we just want the water to get cleaned up."

When Nelson arrived on his land and tried to dump the fish, the load was so heavy that the hydraulic system couldn't lift the wagon enough to empty it. So Nelson drove up a small slope to help the hydraulics lift and dump the wagon.

"Plan B worked I guess," Nelson said. "That's quite a pile of fish, a big pile."

Nelson said he'll probably end up burying the fish on this farmland. That's yet another task, but hopefully the last chore from a winter that produced more than its share of extra work.



Photo by Mark Stell



Think of the Laurentide Ice Sheet as a body, its limbs reaching out as the glacier expanded and contracted during the Ice Age.

One of its limbs was the Wisconsin glaciation. About 75,000 years ago, according to the Minnesota Department of Natural Resources, the Wisconsin glaciation stretched south across the Upper Midwest, forming the landscape we now recognize in Martin County.

Left in its wake were huge chunks of ice and debris, buried in the earth. As the ice chunks melted, kettle lakes formed, many of which can still be seen today throughout southern Minnesota.

Chains of lakes – like the one that starts at Iowa Lake and forms an 18-mile north-south dotted line through Fairmont, ending in Westford Township – formed along the edges of the Des Moines' Lobe. Wet sediment collected and settled, with the melting waters of the glaciers filling in the uneven terrain.

"That's what a lake is: It's a sediment retention pond," said Tim Peterson of Martin Soil and Water Conservation District.

Many of the local lakes settlers first discovered in the 1800s are no longer visible, having disappeared or become swamps or pastures when the land was drained for farmland, wrote Dennis Hoefs in his book, "Chain of Lakes County: An Illustrated History of Martin County."

The human impact on our landscape was inevitable, as development occurred along the shoreline, and farmers tilled the rich soil and installed tiling to create their own drainage systems.

"Land use changes the characteristics of a lake," said Jim Zarling, Fairmont city administrator. "We adapt our natural surroundings to fit the way we live."

Yet the natural evolution of these lakes that we've claimed for household use, storm water drainage, recreation and industrial development slowly plods on.

"It's a natural progression. Over time, through erosion, the lakes fill up from the bottom to the point where they become marshes," Zarling said.

In the 1950s, Fairmont city officials began planning a way to reverse this process, if only temporarily.

"Our community's efforts at changing nature was our dredging program," Zarling said. "... It was pretty extensive."

Fairmont Lake Dredging Report, 1954-1980, indicates in 15 years of actual dredging, 3,055,000 cubic yards of bottom sediment were removed from George, Sisseton and Budd lakes. The project experienced a setback in the 1970s when the DNR denied a permit to deposit the sediment from Budd Lake at a proposed Luedtke Slough spoil site.

When the work on Budd Lake was finally complete, taking twice as long as expected, the cost was \$936,258, much of which came from the city's liquor store revenues.

"We looked at the program as a permanent solution because of the time it takes for (the lakes) to fill back in," Zarling said.

Testing indicates 0.047 inches of sediment accumulate on the lake bottoms in a year.

It will be another 250 years for another foot to come back," Zarling said.

But that doesn't mean the shores of Fairmont's lakes are holding up well. A few years ago, testing showed the bank shores at Fairmont parks are sliding into the water. To prevent more erosion, parts have been reinforced with riprap, and vegetation has been planted to slow the water flow.

But most of Fairmont's lake shores are residential, not city-owned, which complicates attempts to protect area shorelines.

Algae blooms, besides smelling and looking disgusting, add to the problem when vegetation settles in the bottom of the lakes.

How effective efforts to combat the cycle have been isn't really known.

"There isn't one source that has all this information. It's very frustrating," Peterson said. "Nobody has taken all the stuff and made any conclusions. It's just study after study after study."



HENDERSON MUSEUM FOR THE BIRDS

By Brian Ojanpa, Mankato Free Press

In most museums, it's look but don't touch. But in this one, it's all about a hands-on experience.

"Here, you can look at a bird like you've never seen a bird," Dolores Hagen says. "That's the idea – feel, touch, look."

Hagen operates Henderson Feathers, a bird-aficionado resource center in Henderson that has devoted display space to Art and Barb Straub's pride and joy – their expansive collection of salvaged bird specimens.

It was Hagen's idea to encapsulate that preserved birds in inexpensive clear plastic storage tubes that allow viewers up close looks that enable them to literally go eyeball to eyeball.

"For years we dragged them around in plastic bags as we went from school to school," says Art Straub of his and his wife's avocation of bringing their love and knowledge of birds to the masses.

The Minnesota Valley mini-Birding Science Museum allows visitors to observe in fine detail a bird's subtle colors, wing bands, beak shapes and other details virtually impossible to discern at distances.

The collection also includes nests, habitat examples and other general information about bird identification.

The Straubs have been collecting specimens for years, typically relying on birds' untimely demises to augment their cache.

The other day, for example, Straub fielded a call and was on his way to fetch a dead cardinal that had crashed into a woman's window.

Yes, he already has a cardinal specimen, but a prudent salvage-bird collector can always use a spare.

"Rescuing" deceased birds isn't simply a matter of bag-and-go, Straub says. He must jump through the requisite permitting hoops of state wildlife agencies.

"You have to swear up and down that it was road kill or window kill," Straub said as he grabs a tubed bird from a display shelf. The tag inside the

tube reads "Hairy woodpecker, Henderson window kill, 2003."

There are some specimens even a licensed bird corpse salvager can't have. Raptors, for example. Straub says dead eagles must be turned over to Indian tribes for religious ceremonial use.

Henderson Feathers

Located on main street in the City of Henderson, this information center is the place to find out about birds in the Minnesota River Valley and includes a 24/7 telephone reporting service. As a project of the Henderson Chamber of Commerce and Closing The Gap, regular tourism promotions are planned to draw birding travelers from across the country. Henderson Feathers uses video, photos and print media to focus on natural resources in the Minnesota River Valley along with resident and migrating birds using the valley flyway as a route to their breeding Territories – www.henderson.com



Art and Barb Straub show off their specimens – photo by John Cross

Birding Opportunities – Ney Nature Center

According to Audubon Minnesota's Birding Guide, The Ney Environmental Learning Center is across from Henderson and contains over 400 acres of prime bird habitat including woods, grassland, prairie and riparian habitat. The property was donated to the county as a wildlife refuge by the owners. The learning center itself is a fine meeting facility and provides visitors with information and history on the area. Trails wind through the various grasslands, woods and thickets, giving birders access to many excellent birding spots. The feeding stations at the learning center provide a place for more relaxed bird watching after completing a walking tour of the area – www.neycenter.org



By Fritz Busch, New Ulm Journal

Corn and bean farmer Tom Martens hopes the time and money spent over years of court battles ended March 30 when District Court Judge John Rodenberg ordered Nicollet County to complete an outlet control structure on Ditch 46A at 973.8 feet above sea level.

Construction must be done within a year and Nicollet County will be responsible for all construction costs, according to the order.

Looking at the ditch water level near his property, Martens said he expected to lose some farm land but gain some nearby wildlife habitat from the ruling.

A deer stand can be seen in the distance, to the north of a ditch culvert.

The water level is about half way up the culvert.

"Water will be near the top of the culvert after a new weir (small dam) is built," Martens said. "There will be times in the spring when the water is higher than it used to be. But something had to be done. I like hunting ducks and deer as much as anyone. What the weir does for the environment is worth it."

According to Rodenberg's order, the court retains jurisdiction for two years, or until the outlet structure or dam is satisfactory completed and in operation, whichever is longer.

The court will relinquish jurisdiction upon the parties' written confirmation of satisfactory completion of the outlet structure.

The case was an ongoing dispute among several parties over declining water levels on Little Lake and Mud Lake, both of which cover about 440 acres.

Water levels began to fall in the mid-1960s when a sheet pile dam at the Little Lake outlet began falling apart.



In 2003, the Swan Lake Wildlife Association (Association) sued Nicollet County, under the Minnesota Environmental Rights Act (MERA), alleging that the county impaired a natural resource by not repairing the dam and by allowing the lakes to drain.

The Minnesota Department of Natural Resources joined as third-party defendant. Landowners intervened.

In an amended request for relief, the Association asked that Little Lake's dam be set at a crest elevation of 976 feet above sea level.

The case has already been the subject of two Minnesota Court of Appeals opinions.

In this latest analysis, Rodenberg stated that at the 973.8 feet outlet elevation, there may be 3 feet of water at times and in some parts of the lakes. There will certainly not be 3 feet of depth throughout.

Before the existing ditch was constructed or even contemplated, and long before the legislature enacted MERA, there was water over a good deal of Nicollet County, Rodenberg wrote.

Under the appellate cases, as the court reads them, the fact that the Association has proven a MERA violation does not mean that the court must or even should attempt to go back and try to recreate the wetlands as they existed before there was any man-made drainage at all.

Doing that would result in not only lake levels rising into areas that are agricultural, but it would also result in flooding of homes, businesses, roads and other developments.

Areas that were farmed long before MERA was enacted would be converted into a shallow lake.

This is an undue and unwarranted hardship to impose on area landowners in light of the MERA violation . . .

The MERA violation was neglect of the outlet structure. The remedy should and must be related to the violation, Rodenberg's ruling states.

Nicollet farmer Tom Martens stands next to a Nicollet County Ditch 46A culvert near his land.



Land lost to an active Watonwan River

That same stretch of river that provides a quaint backdrop for the Blue Earth County Fair every summer has been keeping Pat Hasher from sleeping at night this spring.

It's the sound of chunks of land – that were once part of a fenced backyard bordered by trees and raspberry bushes – falling into the whooshing Watonwan River that worries her.

"It's scary and very stressful," she said. "The first thing we do every morning is go out and check the river. The last thing we do every night is go out and check the river. It's worrying all of us. It's affecting all of us."



When Pat and her husband, Dick, moved into their Garden City house 37 years ago, there was a terraced, three-level yard stretching down to the river from their back door. On the side of the house there was room for two sheds, a fenced yard, a row of blue spruces and the raspberry bushes.

Most of what is gone now and the river was roaring past one corner of their house, which is just a few feet away from losing all the ground below it. The Hashers live in a small, three-house neighborhood that is now cut off from the rest of Garden City. A bridge that used to connect the two sides of Main Street has been closed for years.

The land around their house has been slipping away steadily for about 10 years, she said. Serious flooding in the late 1990s started washing their bank away slowly. Big chunks of land started falling off their yard when the water high this year.

Erosion specialists with the federal government, state and county have all been to the property to see what's been happening, Pat Hasher said. They've all told the couple using boulders or concrete to stop the erosion are not options.

The Watonwan River is not the same river it was when they moved into the house, Hasher said. It's more powerful now in the spring than it's ever been.

"When the river was low, our son would just take off his shoes and walk across to go to school," she said. "In the 90s we really noticed it started getting bad. I know we've lost 15 feet or more of property."

"At one time the trees were so grown up you didn't know the river was there. You could hear it, but you couldn't see it."

State Rep. Tony Cornish said he talked to the Hashers about their concerns in 2001. The Department of Natural Resources didn't want to offer too much help because that would set a precedent, he said. There were, and are, many homeowners and businesses on rivers throughout the state facing similar problems.

"They were worried if they started this they would open a Pandora's box and there would be a whole mess of claims," Cornish said.

There were no guarantees any action taken would fix the problem, so relocation was the only option then, he said. There is a sharp curve in the river before the Hasher property.

"Even if they did something at their own cost, it would take massive boulders being moved in to take care of the problem," Cornish said. "It would be cheaper for them to relocate the house than to do all that."

If the Hashers' house is lost, Kim Gores said she's concerned her house will be the next one threatened. Her yard abuts their yard. She believes more could be done to save the old Main Street neighborhood.

It's not that we're mad at the river," Hasher said.

"I love the river," Gores added. "It's Mother Nature I don't love right now."

FREDERICKSON RETIRING

State Senator Dennis Frederickson announced his retirement from the Senate, signaling the close to a career that has served this area very well for 30 years.

At a time when the political arena seems to be more polarized and partisan all the time, Frederickson remains an anomaly. He is a politician who, to our knowledge, has never said a bad word about an opponent, a politician who listens to all with courtesy and respect, who works equally well with Democrats and Republicans, and who gets things done with hard work instead of arm twisting.

We have often thought that if everyone in the Legislature was like Dennis Frederickson, things would run a lot more smoothly in this state.

Frederickson has been a passionate advocate, if a quiet one, for the issues close to his heart – farming and the environment. His colleagues consider him a leader on these issues, and he has been instrumental in crafting the major pieces of legislation to come out of the Legislature in the past several years, especially the Clean Water Legacy Amendment which was approved by voters two years ago and is staring to provide much-needed funding for clean water, the environment, habitat, and for the arts.

Over the past three decades Frederickson has earned the respect of his colleagues in the Senate, of his constituents and even from his opponents. It has been a long time since a serious opponent has faced Frederickson in an election.

Republicans and DFLers will be searching for candidates to run for his position. They will have to search long and hard to find someone with the qualities of Dennis Frederickson.

- New Ulm Journal Editorial

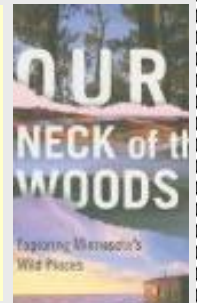


Senator Dennis Frederickson in the red plaid shirt

Book Review: Our Neck of the Woods edited by Daniel J. Philippon

At the narrows of the lake, I cross over a little arch of land and put in at the river, which, in this shadow morning light, looks like a dark artery, or vein, running deep in the dense body of a forest so tropically profuse that it seems impervious, foreign, organismic, a place where the trees cannot be seen for the forest. I stifle my breath, so raucous it seems in the surrounding stillness, and paddle my way dreamily upriver, turning the blade at the end of each stroke and pulling it forward underwater so as not to violate the reverential air. – Paul Gruhow, “The Grace of the Wild.”

Drawn from the pages of Minnesota Conservation Volunteer magazine, these stories cover the unique places found in Minnesota by notable writers and conservationists like Sigurd F. Olson, Paul Gruhow, Bill Holm, Jan Zita Grover, Laurie Allman and many others.



I slow my truck to a halt, turn off the engine, and step outside. Above me, a curtain of aurora borealis shimmers over the landscape. I move away from the dying pings of the motor and pause in the middle of the road. I can feel the nighttime. It overwhelms me. I take a deep breath and slowly exhale. Ice contracting on distant lakes echoes on the hushed air, like the boom of artillery. I stand motionless, straining to pick up the faintest telltale sound. Then, ever so softly, the harmonic notes I am listening for: the staccato song of the male boreal owl. – Bill Lane, “My Night Life with the Boreal Owl.”

In my yard, down by the lake, stood a big dead cottonwood. The tree was branchless except for a few stubs, barkless and leaning slightly toward the water. To my undiscerning eye, it appeared to be good for nothing but firewood – but not very good for that. But the cottonwood was vitally important to others. That much was brought to my attention dramatically by the desperate avian battles fought every spring for over nine years over possession of the tree. Slowly I came to see that to certain birds it was prime housing material, potentially as valuable as life itself. I also came to see that for the birds, as for people, time and labor are required to add value to raw materials and, furthermore, that even among the birds it is not always the laborer who benefits from his toil – Evelyn Wood Moyle, “Battle for the Cottonwood”

The cabin on Snowbank Lake was primitive; the unpeeled logs were chinked with moss; there was no floor and only one small window. The cabin faded into the tall black spruces around it as if it had always been there. It smelled of balsam, for one corner was a bunk full of resinous tips and on the packed dirt floor needles were the pattern. – Sigurd F. Olson, “Trapper’s Cabin.”

RIVER RAMBLINGS

by Scott Kudelka



Spring came early as it seems to be pretty common over the last few years, especially for anyone paddling the rivers in the Minnesota River Basin. I made it a point to get out before March disappeared by tackling the Big Cobb River with Katie and Joel. For Joel and me it was our first time on the Big Cobb while Katie has come to see it as one of her favorite rivers to paddle in the area. You couldn't have asked for a better day to be out on the river as we enjoyed the diverse landscape and Class I and II rapids.



If you want to explore the Minnesota River Basin paddling its rivers is the way to go. The Minnesota River and its many tributaries all have something unique to offer and a chance to see what the landscape once looked like. In all the years I have paddled here I have only run across one or two other paddlers. No matter the experience level you have as a paddler there is a river for you to try and enjoy. A big plus is the number of organizations who sponsor paddling trips for the general public all across the basin.

On June 12th the Minnesota River Watershed Alliance is sponsoring a Blue Earth River Paddle from the Rapidan Dam down to Highway 90. This event will be the launch of our Minnesota River Paddler Program and a chance to spend the afternoon listening to a wide variety of music. The program is designed to help people connect to the rivers in the basin and recognize what an amazing resource we have here and promote the effort to improve and protect water quality.

The Watershed Alliance is also involved in putting together a Lake Pepin Conservation Tour to highlight the effort to improve water quality in the Minnesota River Basin through the installation of Best Management Practices. The plan is bring people from the Lake Pepin area over to the Minnesota River Basin as a way to highlight some of the effort to reduce sediment and nutrients from reaching this lake on the Mississippi River. We hope to spark a dialogue on how we can all work together to improve and protect water resources in the state of Minnesota.

A third effort supported by the Watershed Alliance is the production of a Minnesota River Film Documentary spearheaded by John Hickman and Jon Carlson. The documentary has attracted support by a wide range of organizations and people including Ron Schara, the Water Resources Center, Friends of the Minnesota Valley, Coalition for a Clean Minnesota River (CCMR), Clean Up the Minnesota River (CURE), Minnesota Pollution Control Agency (MPCA) and many others. This one-hour documentary will look at the Minnesota River Valley from its geological origins to the effort to protect this unique resource.

I would be remiss not to mention something about Senator Dennis Fredrickson retiring after 30 years of serving southern Minnesota in the state senate. We couldn't have asked for a better champion when it comes to the Minnesota River and his desire to protect our natural resources went beyond this basin. We can especially thank Senator Fredrickson for helping designate numerous state water trails including those on the Cottonwood and Redwood rivers. There is no doubt we will miss his presence and ability to work with everyone on these issues. Thanks Senator Fredrickson!



After a paddle on the Little Cottonwood River



Fox Lake Purchase

The purchase of 160 acres of land by the Fox Lake Conservation League in western Martin County will in turn be sold to the Minnesota Department of Natural Resources. According to the Conservation League, this is a big step for the club and bought to improve property on Fox Lake. This property will become part of an expanded Four Corners State Wildlife Management Area. In addition, the League plans to donate \$10,000 to help restore area wetlands. Currently, the DNR owns almost 3,000 acres in Martin County not counting bodies of water out of a total of 450,657 acres.

High Island Creek Water Quality Effort

Over a three-year period, High Island Creek Clean Water Partnership offered cost-share to install a wide range of conservation practices. Twenty-four



Streambank Restoration

organizations worked together to promote positive land use changes in order to improve and protect water quality and quantity, along with promoting a sense of watershed

stewardship and awareness. From September 1, 2007 to April 1, 2010, funding from the Minnesota Pollution Control Agency were used to enroll 53.4 acres of filter strips, 20 acres of wetland restorations, 2,096.51 acres of cover crops, along with installing 64 open intake alternatives, 1 rain garden, 1 structural practice and handed out 50 rain barrels.

A wolf in southwestern Minnesota?

Out in the Montevideo area a woman hit and killed what she reported to local sheriff as a coyote. Only the 81-pound animal is most likely a wolf, according to John Erb, Minnesota Department of Natural Resources wildlife research scientist. Erb said that it would be quite unusual for a wolf to be found in southwestern Minnesota but not a surprise. "Wolves can travel a long ways." This could be the first confirmed wolf sighting in this area in 100 years.

Cooperative efforts needed to combat erosion – Mankato Free Press Editorial

Dick and Pat Hasher know as well as anyone how the rivers in the Minnesota River Basin have changed.

The Garden City couple, who has lived on the banks of the Watonwan River for 37 years, has in the past decade or so seen the river rise faster and higher during spring melts and after rainfall. That brings a host of increased problems, from more sediment and pollution entering the river to more bank erosion, flooding, loss of trees and threats to property.

Some bank erosion is natural and inevitable. Flowing water and large floods will always carve ravines deeper and widen rivers. It's been the case in the Minnesota River valley since it was carved out 12,000 years ago. And massive floods in the past decade or so perhaps spawned in part by climate changes bringing more precipitation have done more damage to stream banks.

But there is enough scientific and anecdotal evidence to know that manmade changes primarily farmland drainage improvements have exacerbated erosion problems.

There are 10 million acres in the Minnesota River basin and 90 percent of it is cropland mostly corn and soybeans. With the advent of plastic farm tile and machines that easily bury it the amount and effectiveness of farmland drainage has increased dramatically.

Water that was once held back in soil, marshes and grassland today is quickly flushed through mazes of tile, drainage ditches and ravines and sent to streams and rivers like pulling the plug in a bathtub.

Besides the sheer volume of water, the rapid flow of water and related soil erosion increases pollution. According to research, 10 to 20 percent of sediment from eroded soil off a typical farm field along a river is deposited directly into the waterway. That sediment carries with it phosphorus, nitrogen and other pollutants.

More urban drainage, from parking lots and other development also adds to the flow of water. Addressing those problems has been easier and more effective as cities can and have been required to create settling ponds and other improvements to slow urban runoff and clean water before it enters rivers.

Tacking farmland issues is more complicated, but not impossible. Buffer strips around tile intakes and along ditches and waterways hold back sediment and pollutants. Restoration of erodible land through conservation easements helps.

And developing technology is promising in holding back the amount of water. Mechanical shut-off valves that close tile lines after surface water has drained from fields holds back water deeper underground that doesn't need to be drained away. That not only slows erosion but keeps soil moisture under fields a bit higher for use by crops during hot summer weather and it holds in more of the valuable fertilizer crops need.

Farmers need the ability to have fields dry out quickly enough after heavy rains to work their fields and to keep crop from flooding out. Having rivers run through some of the most productive farmland in the world brings inherent conflicts.

But progress can be made to the benefit of everyone. It will take more focus on and financial incentives for farm drainage improvements and conservation through the federal Farm Bill as well as state and county projects.



WETLANDS

Wetlands – long considered insect-ridden, unattractive, and dangerous areas – have in this century begun to be recognized as beautiful places with a rich and exciting variety of plant and animal life just waiting to be explored by the curious and the adventuresome. Historically, the importance of wetlands has been overlooked, but recently this outlook has changed dramatically because the vital ecological roles that wetlands served have been documented.

Wetlands evoke powerful emotions. To some they are dark, mysterious, forbidding places, to be avoided at all costs. To many novelists, poets, and artists, however, they have been a source of inspiration including Sir Arthur Conan Doyle's The Hound of the Baskervilles – “Rank weeds and lush, slimy water plants send an odour of decay and a heavy miasmatic vapor into our faces, while a false step plunged us more than once thigh-deep into the dark, quivering mire, which shook for yards in soft undulations around our feet.”

Wetlands are areas where is the primary factor controlling the environment and the associated plant and animal life. These transitional habitats occur between upland and aquatic environments where the water table is at or near the surface of the land, or where the land is covered by shallow water that may be up to six feet deep. Most wetlands are dominated by hydrophytes, or wetland plants; these can tolerate various degrees of flooding or live in frequently saturated areas. Most wetlands are characterized by fluctuating water levels and by soils that are distinctly different from those of dry, upland areas.

Wetlands play many roles. They are invaluable in controlling floodwaters, recharging groundwater, and filtering pollutants; as a habitat for waterfowl and other wildlife, a support for fisheries, and sanctuaries for rare and endangered species; and for their educational, recreational, and aesthetic promise.

Wetlands are of major importance in the hydrologic cycle – the pattern of evaporation, precipitation, and flow to the seas. They can serve as temporary storage basins, lower flood crests, and contribute to groundwater recharge. They can also reduce erosion and the destructive potential of severe floods. With increased development and the paving over of large areas with asphalt and concrete, we greatly speed up the rate at which storm waters move off the land and thus increase the likelihood of flooding.

From the book “Wetlands” – a National Audubon Society Nature Guides. A comprehensive field guide, fully illustrated with color photographs, to the trees, wildflowers, fishes, insects, birds, and other natural wonders of North America’s rivers, lakes and swamps.

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