

Spring for the Water

The 4th Annual "Spring for the Water" is coming up. Mark your calendars for 5:30—8:30 p.m. on March 29 at the Northern Great Lakes Visitors Center in Ashland.

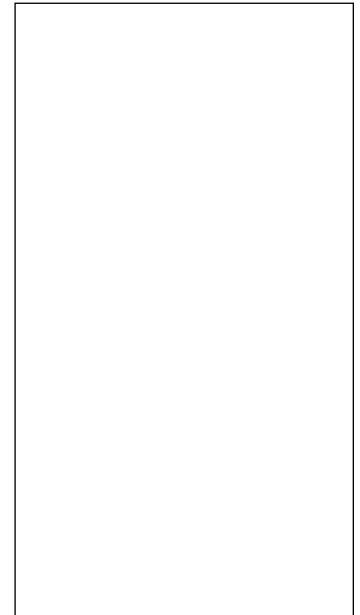
Once again, you can mingle with neighbors and fellow supporters of stewardship of the Bad River watershed. You can enjoy imaginative and festive treats prepared by the same fabulous team that fed us in the past. And you can bid on one-of-a-kind auction items while enjoying Glenn Walker Johnson's soothing and mellow harp music.

This year, we have a special treat prepared for you. We're developing a multimedia presentation that highlights the beauty of our watershed, and the role of the Bad River Watershed Association in learning about and caring for it. With the help of our partners and local citizens, we've combined descriptions of our existing and future programs with fantastic local photography, so that you can better understand the great work you are supporting.

Just a peek at the auction items available includes a White River canoe trip, a stay at Penokee Mountain Inn Bed and Breakfast, and your own private fish boil for your family reunion or major patio party this summer. Other locally crafted items you have come to appreciate at this event include traditionally woven Native American Ash Baskets, local maple syrup, wild rice, and hand-tied trout flies.

Have you ever bid on getting your septic tank pumped? We all need it, and this year, Number 2 Septic Services is donating a pumpage that you might just get for under-market value.

Tickets are \$25/person, which includes dinner and beverages. And we hope you will bid high and often on treasures from the area. The money you leave behind will help us study and steward the Bad River watershed. For more information, or if you wish to donate something for the auction, call Michele at 715-682-2003. ♦



Cutline

A Watershed Connects Its People



The Bad River Watershed

A watershed describes a landscape where all water flows to a central point and joins together, regardless of its beginnings, on its journey towards a common place. A watershed is also a powerful symbol for the energetic connection that brings together people from a wide range of backgrounds and ideals toward a common purpose within the Bad River watershed in northern Wisconsin. This connection to the water and by the water brings about a powerful sense of ownership and responsibility to care for the watershed which provides so many services to us and unites us as a community.

Bacteria Monitoring in the Watershed

Last summer, BRWA added bacteria monitoring to its regular schedule of water quality sampling. Volunteers collected water samples between three and six times at 14 sites in the watershed, often during or immediately after a rainstorm.

The results have been somewhat disturbing. At half the sites, we recorded bacteria counts above the EPA limit. These high concentrations affect the health of wildlife and humans.

While *E. coli*, the bacteria we test for, is not itself particularly harmful, it is an indicator of fecal contamination, which can carry pathogens that make people ill. (Rather than test for specific pathogens, the test for *E. coli* bacteria is more reliable because these bacteria generally live longer than pathogens, are found in greater numbers, and are less risky to collect or culture.)

Swimmers exposed to fecal contamination often develop gastrointestinal illness (see accompanying box). However, sometimes it is not necessary to actually swim in contaminated water to get sick. A study by the Marshfield Clinic found that incidents of children's diarrhea correlated with high densities of septic systems, many of which were suspected to be malfunctioning because of age or illegal discharge to surface waters. (Borchardt, et al., *Environmental Health Perspectives* 111: 742-748, May 2003).

The next issue of *Watershed Waves* will include an article about the possible sources of bacteria in our rivers and streams and what we might be able to do about it.



The US Geological Survey explains how the EPA standard for *E. coli* was devised:

Current guidelines established by the U.S. Environmental Protection Agency (USEPA) result from studies conducted at marine and freshwater beaches in the late 1970s and early 1980s. In 1986, the USEPA recommended that *E. coli* be used as an indicator of fecal contamination in recreational waters.

The standard was set at a mean concentration of 126 colonies of *E. coli* per 100 milliliters of water, which was estimated to be correlated with a gastrointestinal illness rate of about eight individuals per 1,000 swimmers.

How was this determined? Swimmers and non-swimmers were interviewed at freshwater bathing beaches on Lake Erie in Pennsylvania and on Keystone Lake near Tulsa, Oklahoma. Swimming was strictly defined as activity which resulted in all upper body openings being exposed to the water. The beaches had different levels of fecal indicator bacteria.

After 8 to 10 days, the swimmers and non-swimmers were interviewed again with regard to symptoms of gastrointestinal or respiratory illness. The prevalence of gastrointestinal or respiratory illness was then compared to the concentrations of *E. coli*, enterococci and fecal coliforms on the day of swimming, as well as between swimmers and non-swimmers.

The conclusion of this study was that *E. coli* and enterococci showed the strongest relationship with swimming-associated gastrointestinal illness. It is not a simple task to arrive at recreational water quality standards. No single test is infallible or correct for every situation. Individuals use recreational waters in different ways, and are not equally susceptible to disease due to their different behaviors and their prior health conditions. Although not every swimmer in these studies suffered gastrointestinal illness, there was a relationship between *E. coli* concentrations and people getting sick.

BRWA's Culvert Program: Watershed perspectives, on a local scale

BRWA is gearing up for culvert replacements this summer. There are more than 1,000 road stream crossings scattered across our 675,000-acre watershed.

Many of these sites were flagged in our Needs Assessment as fish passage barriers or erosion hot spots. With so many options, where do we start?

We're working with town road crews and town boards to select sites for remediation. Road crews and local residents know the crossings in their

areas—which ones wash out regularly, and which ones get extra gravel each year. So we've narrowed our basinwide inventory results down to township specific areas. That way we can find sites that match our criteria (fish barriers or erosion problems), with sites that townships are looking to renovate as well.

Town road crews and contractors that put in culverts will be attending a workshop in Rhinelander this April to learn design and installation techniques

for fish friendly culverts. BRWA is covering registration and travel costs.

So far, we've met with representatives from the following Towns: Ashland, Sanborn, Lincoln, Kelly, Grand View, White River and Morse. If you are a town representative and would like to attend the training, or if you would like your town to get involved with this effort, please contact Michele at 682-2003.

Enjoy the North Country National Scenic Trail

One of the great recreational treasures of the Bad River watershed is the North Country Scenic Trail. You can enjoy beautiful overlooks, explore abandoned logging camps and an old Swedish settlement on the Wisconsin section of the trail.

Established in 1980, the trail passes through 10 national forests, 57 state parks and 47 state forests across northern sections of the United States. When complete, the trail will stretch 4,625 miles from New York to North Dakota, making it the longest scenic trail in the country.

Two local chapters of the national North Country Trail Association (NCTA) help to build and maintain sections of the trail in the Bad River Watershed. Copper Falls state park divides the two chapters, with members of the Chequamegon Chapter working on sections to the west, and members of the Heritage Chapter working on sections to the east.

In the Bad River watershed, the trail crosses through the headwaters of the White River basin just south of the Eau Claire chain of lakes. It crosses the Long Lake branch of the White River northeast of Drummond. From there the trail travels towards Lake Owen (also in our watershed) and through the Porcupine Lakes Wilderness Area.

From the Porcupine Wilderness, the trail enters the Marengo subwatershed, crossing the Brunsweller River. At Copper Falls, you can stop to see where Tyler's Forks joins the main branch of the Bad River by plunging into the canyon over Brownstone Falls.

In mid-September of 2007, Chequamegon Chapter members and other volunteers built a rustic 28-foot log bridge over Porcupine Creek in the Porcupine Lake Wilderness. Only hand tools were used as a requirement of the wilderness status of this area.

"I am still amazed when we have a big turnout for trail maintenance days," says Marty Swank, chairperson of the Chequamegon Chapter of the NCTA. "All of our sections of the trail have been adopted by dedicated volunteers. It is awesome company that I keep."

The trail offers opportunities for short day hikes, camping and backpacking. Pick up a trail brochure or forest map at the Northern Great Lakes Visitor Center. While you're there, you can request to see the Chequamegon Chapter's 2007 slide show that highlights their work on the trail. Trail brochures and maps can also be picked up at the USFS ranger station.

For further information, see www.northcountrytrail.org or contact Chequamegon Chapter Chairperson Marty Swank at 715-682-2254 or martyinashland@webtv.net. ♦



Juniper Rock, Marengo Valley

Favorite Trail Segments

Watershed Waves asked some BRWA regulars about their favorite part of the North Country Trail. They all mentioned the same segment! Here are their comments:

Our favorite segment is very popular in this area. It is the trail from Old Grade Rd (Sec.9,T.44N-R.5W.) east to the overlook on the way to the Swedish Settlement. It takes us through maple and mixed hardwood forest to the river lined with evergreens. On the way, with just a small effort up the turnoff to the right, is an impressive overlook of the Penokee Mts and the Marengo River.

—Jack and Mary Wichita

Earlier this winter a neighbor and I loaded our kids up into otter sleds and hauled them out across the snow to Juniper Rock and on to the Swedish settlement site. There we had a little fire, ate GORP, and drank hot cocoa from a thermos—a fantastic winter day on the trail.

—Michele Wheeler

My favorite section in the Bad River Watershed is known as the Swedish Settlement section that runs from Old Grade Rd. on the west to Snake Trail on the east. It's about a three or four mile section that has three spectacular lookouts of the Marengo River Valley and the surrounding northwoods. While standing on those lookouts (especially during peak fall color) I gain a new appreciation for the special place in which we live. The Adirondack shelter on the Marengo River in this section is where my wife, Sara, and I got engaged, so that place will always be special to us. Seeing the remains of the Swedish Settlement along this section also helps one appreciate the past human presence in an area that now looks completely different.

—Matt Hudson

Local Farmer Kretzschmar Tells His Story

“So is it true,” asked Kent Goeckermann, moderator of First Person Local, “that when the government brought Russian farmers to your place, they refused to believe how much milk you were getting from your cows?”

“Yeah, true,” said Rich Kretzschmar, one of the speakers at our recent oral history event. “At that time, the Russians were still getting about 3,000 pounds of milk a year per cow, and we were getting about 10,000. They thought our numbers were due to some capitalistic plot.”

Rich Kretzschmar farms in “Cozy Valley,” along Hwy 169, between Mellen and Gurney. At one time, he had the best-producing dairy herd anywhere in the world. He told us the story of how he got there from—well, nothing. His folks had been sent to Wisconsin by the North Dakota Lutheran pastor who married them. Having managed to get to Wisconsin, they had no money to turn around and go back, so they stuck it out. Starting with eight cows, the Kretzschmars now milk around 800.

Rich attended school through the eighth grade there, but he says his education is from the School of Hard Knocks. Evidently. Not afraid of new ideas, Kretzschmar told us how, some years ago, a UW Extension agent suggested he try a new style of building for his next shed—a pole barn. It was the first in the area. He also attributes much of his success to the improvements in genetics in cows and corn.

But Kretzschmar is not just about new technology. He also picks up new ideas that go against the modernist thread. He told how he once bought a potato field that had been so doused with pesticides and fertilizers and there was not a single earth worm crawling around. After using “no till” practices and only manure for fertilizer, he said the land came back to life, and now there are worms—a-plenty.

Many changes have taken place over the generation that Rich has been farming in Cozy Valley. Once cheese factories dotted the north. Farmers hauled their own milk to them. Now, while the number of dairy farms everywhere is decreasing, the size of individual farms continues to increase, although in our area farms are not as large as in California or Texas.

Kretzschmar told the audience at the January event about his daily journal in which he recorded his activities since early in his youth. “Well, it sure does settle a lot of arguments,” he said. Probably it is that penchant for documentation that led him to participate in the Dairy Herd Improvement program,



First Person Local: Thanks to Sylvia Cloud, Rich Kretzschmar, and Bonnie Bergman for sharing their stories at our 3rd annual storytelling event, First Person Local, on January 22. And Thanks to Kent Goeckermann for moderating.

and, by keeping careful records, to having the highest producing herd in the nation in _____ YEAR???

Kretzschmar has turned his farm over to his son. Not every farmer in this area can say that. Many are looking at an uncertain future, with few people interested in the slim margin of profit that farming produces these days. But by carefully limiting the costs of off-farm purchases, and using manure and other on-farm resources, farmers like the Kretzschmars are successful. And the water and the land are both happier for it. ♦

Editors note: After the “cutover” of native forests around the turn of the last century, many people attempted to farm the open land left by the lumbering operations. Acres of unvegetated land were left for rain and snow to wash away, and huge ravines developed in the landscape. During the 1940s, farmers were encouraged to keep their cattle out of the streams, and today most do. Yet nutrients from animal waste and fertilizers intended to stay on fields can run off into waterways, polluting rivers for human use as well as the critters that live in them. Dairy farming is by far the most prevalent type of agriculture in our region and BRWA is eager to get to know the techniques that local farmers are using to protect water quality.

Quality Control in Our Water Monitoring

On February 21, BRWA held its 4th annual quality control session for water monitoring volunteers in Andy Goyke's biology lab at Northland College (Thanks Andy!) At these sessions, we provide volunteers with a prepared water sample and ask them to test it. This procedure ensures that our data is credible, and helps keep our monitoring work consistent at the 18 sites we sample across the basin.

This year, Ed Kolodjeski from the Bad River Natural Resources Department came along as well. BRWA volunteers and tribal technicians monitoring side by side ensure that data from our two groups are comparable.

Again this year we found that our volunteer data is consistently close to standards. Our volunteers are collecting meaningful data we can use to care for our watershed. Thanks BRWA volunteers! ♦



Thank You!

New Volunteers: Morris Lewis, Michael Klump, Michael McCutcheon, Naomi Tillison, Thomas Wyse.

Veteran Volunteers: The Rekemeyer family, the Stone-Dahls, Dane Bonk, Karen Danielsen, Joan Elias, John Franke, Matt Hudson, Leslie Kolesar, Tracey Ledder, Rae-Ann Maday, Darienne McNamara, Suzy Sanders, Tana Turonie, the Wichita's, Roland Wolff, Colleen Matula, Karla Hassart.

Donor businesses and organizations: US EPA, Norcross Foundation, Environmental Support Center, Wisconsin Environmental Education Board, Alliance for Sustainability, Town of Grand View

Individual Donors: Dennis and Pat Musil, Hans Kastens and Ulrike Cords-Kastens, Glenn E Grage, Matt Hudson and Sara Helgeson, Irene Blakely, Susan Sederholm, Jack and Mary Wichita, Tom Piikkila, William Devries, John Bonk, Eleanor Williams, Carolyn Sneed, Sara Sneed Ttees, Wendy Stein, Bobbi Rongstad, James Oakley and Anne Chartier, Dr Soe M. Thein, Elden and Catherine Tetzlaff, Eleanor G. Bussey, Janice Vogel, Leslie Jagger and Dorothy Lagerroos.



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Invasive Species Events

BRWA will be working with the Northwoods Cooperative Weed Management Area (NCWMA) which is a collective of over 22 agencies, state and local governments, organizations and tribes in northern Wisconsin.

This summer, we will host five invasive species field days with the NCWMA to provide community members with an overview of the invasive species issues in their neighborhoods, as well as hands-on experience and guidance in controlling some of the most aggressive species in the area.

Let's go get rid of these nasty invasives before they spread even more! We'll target specific species—one per month throughout the summer. Call Michele at 682-2003 to get involved in making a difference locally.

May—Garlic Mustard: A new infestation was reported along the Bad River near Mellen. The seeds from this plant can spread downstream, with significant impacts to the reservation.

June—Japanese knotweed: This invasive poses a serious threat to riparian areas.

July—Spotted knapweed: This plant directly impacts the sandspits and shore lines along the coast and the sandy areas in the pine barrens. It replaces native vegetation and changes habitat for migratory and nesting birds.

August—Leafy Spurge: To date, leafy spurge populations are small and localized, containing these areas will be essential to preventing them from spreading into the national Forest and other adjacent lands.

Address Service Requested



Spring 2008 Watershed Waves



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All the latest news
from your



Upcoming Local Events:

March 18: Something with Scott Toschner.

March 18: History and Geology of Copper Falls and the Surrounding Region with Kent Goeckerman, 7:00 pm at the Vaughn Public Library For more info call 682-7060

March 19: The "State of Agriculture in Ashland and Bayfield Counties" with Jason Fishbach, UW Extension Agricultural Agent 7:00 p.m. at the Northern Great Lakes Visitor's Center. For more info contact the Alliance for Sustainability at 682-1189

March 29: BRWA's 4th annual fundraiser Spring for the Water featuring the debute of our "Connecting People, Land and Water" slide presentation, gourmet food and a silent auction of fine local crafts.