



**FRIENDS of the
BLACK RIVER**

A Citizens' watershed
conservation organization

Reading the River



Volume 15, Issue 4 ~ Winter 2018

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What's happening here?



See page 5 to find out more about the photo. Photo by Pat McKnight

Greetings from the president

Winter is here. We sure had a cool November and now can use some more snow for winter sports. I don't mind winter even though the cold and snow requires more effort to get around and get things done.

We had a great crowd for our movie this year, and the film was quite informative about the Driftless Region.

At our last board meeting, we added two new board members. They are Adam Marciniak and Sherrill Anderson, both from the Neillsville area.

They plan to work on activities in Clark County as well as provide assistance to us in Jackson County. Adam is already working on plans for a cleanup in the Neillsville area.

Greetings, continued on page 6

Vision

The Friends of the Black River is a citizen-led organization that is a well-informed, respected, active contributor to projects and decision-making enhancing the river and its watershed.

Mission

The Friends of the Black River will foster community appreciation, understanding, and sustainable use of the river and its watershed by hosting educational and enjoyable programs, events and conservation projects and by promoting wise decision-making when issues affect the health of the Black River Basin.

Upcoming meetings

Wednesday, January 9, 2019 - Monthly meeting, bird house making

January—Snowshoe hike, time and day to be determined

Wednesday, February 13, 2019 - Monthly meeting, program—Black River Falls dam

Watch for messages sent to your email box for up-to-date announcements of future events.

Announcements about FBR activities are also posted on FBR's Facebook page and website, the Black River Area Chamber of Commerce's calendar of events, the School District of Black River Falls' television channel and broadcasted on WWIS Radio.

We welcome suggestions for program and ideas for presentations for 2019 meetings. Send ideas to FBR email address at info_fbr@yahoo.com.

Monthly meetings are free and open to the public. Programs subject to change. Unless indicated otherwise, the Wednesday evening programs are held at 6:30 p.m. in the lower level community room of the Jackson County Bank.

New board members represent Clark County



Adam Marciniak of Marshfield has recently welcomed as a new FBR board member.

With the addition of two new board members, FBR has expanded its outreach to Clark County. Adam Marciniak of Marshfield approached the FBR Board in October and reported on his efforts to clean up the Black River where it flows through the county.

Adam is not only an avid angler, he is a businessman owning Crossover Fly by Marciniak Designs; his company makes and markets fishing flies.

He is working to get more Clark County residents active in river cleanups and other ways to preserve



Sherrill Anderson of the Neillsville area is a new member of the FBR board.

the Black River.

His philosophy is the more trash collected up-river means less will need to be cleaned up down-stream.

Another Clark County resident, Sherrill Anderson of Neillsville, has joined the FBR board. She became involved after learning about Adam's river cleanup campaign from a newspaper article.

Sherrill brings experience and skills she has acquired working for other conservation and environmental groups.

New documentary draws crowd to annual holiday movie night

The special and unique geological, biological and archeological features of the Driftless Region were the stars of a film shown at the Black River Falls Middle School.

Around 50 people viewed the recently released documentary “Decoding the Driftless,” presented Dec. 4 in the middle school’s large group instruction classroom. The documentary presentation was sponsored by the Friends of the Black River for its annual holiday movie night.

The film was produced by George Howe, Tim Jacobson and Rob Nelson, the same team who created the Emmy-award winning pilot film, “Mysteries of the Driftless.” For the most recent feature-length production, Swedish filmmaker, Jonas Stenstrom of Untamed Science joined the team.

“The Driftless Region is simple and complex,” said Stenstrom in the film.

The story of the Driftless Region begins around 500 million years ago when the region was covered by a tropical sea and the continents had a different form. Over the millennia, numerous layers of marine animals and sediment were deposited. The deposits became the layers of sedimentary rock forming the bluffs of the Driftless Region.

The Driftless Region’s bluffs and coulees were formed by water erosion as well as the runoff from the melting glaciers in adjacent areas. The varied colored rock layers forming the bluffs serve as a geological calendar.

Eons ago, the earth experienced ice ages where glaciers covered a large area of the northern hemisphere, except for the area now known as the Driftless Region. The region is situated on both sides of the Mississippi River from south of the Twin Cities in Minnesota in the north to northeastern Iowa and northwestern Illinois in the south.

As the Ice Age drew to a close, melting glaciers deposited silt, clay, sand, gravel and boulders called glacial drift. Since the unglaciated region didn’t get any of the deposits, it’s known as the “Driftless Region.”

Segments of the film showed fossil hunters discovering remnants of prehistoric



Gil Homstad (right) talks with filmmaker George Howe following the showing of “Decoding the Driftless” at the Black River Falls Middle School. Photo by Pat McKnight

creatures forever locked in solidified rock layers deep underground. The elements wore away the sedimentary layers to expose the oceanic-animal fossils. The film showed fossil hunters finding fossils in surface streams of the Coulee Region and in the limestone caves in the area. One underground cave system has over 17 miles of tunnels that have been discovered so far.

The filmmakers also explored the sink holes of Iowa and Minnesota. The sink holes form where there’s a shallow layer of top soil over the limestone. When precipitation seeps into the ground, it dissolves the limestone rock creating the holes and caves.

In addition to the geology of the region, the film also explored features created by early human inhabitants. During a visit to area effigy mounds, filmmakers wondered why prehistoric humans created the animal shaped mounds and at the labor that would have been involved in the endeavor.

One of the favored animal forms was the falcon. The filmmaking crew was able to get to know about the actual bird of prey when they joined an operation to band a nest of peregrine hatchlings. Members of the team rappel down a bluff face to reach the down-covered birds in a ledge overlooking the Mississippi River.

The film also captured the migration of the various waterfowl using the river’s flyway. An officer for the Upper Mississippi National Wildlife Refuge stated some 320 bird species use the flyway during migrations.

Movie presentation, continued on page 6

Sand mine reclamation program presented

A bluff or ridge mined for frac sand can't be restored to its original form, but it's possible to reclaim the land for economical or environmental use.

A program about efforts to reclaim land at a sand mine operation in Chippewa County was presented at the Nov. 14 Friends of the Black River meeting.

Dan Masterpole, Chippewa County conservationist; Dr. Holly Dolliver, UW-River Falls' geology and soil science professor; and her students have been working to establish prairie habitat on acreage leased by Superior Silica Sands in the town of Auburn in Chippewa County.

State law requires non-metallic mines to limit the environmental impact of their operations and to reclaim mined land while the extraction is underway.

Past practices of simply pushing the waste material back over the extraction area is no longer favored, and counties are including provisions in their permits to require the operators to "think beyond site stabilization."

"The law was written to ensure a high level of reclamation," said Masterpole. "The goal has changed from site stabilization to target high-value reclamation."

Because of residents' input, counties issuing permits to sand mine operations have included stricter reclamation stipulations in the permits.

"If we didn't hear from the public, we wouldn't have exercised our compliance requirements," said Masterpole. "Chippewa County allows for public review (of mining operation plans)."

Western Wisconsin is one of the largest suppliers of frac sand with some mines exceeding more than 1,000 acres. While the demand for the sand used in hydraulic fractur-



Dr. Holly Dolliver, UW-River Falls' professor; (left) and Dan Masterpole, Chippewa County conservationist, answered questions following their program about reclaiming frac sand mined land. Photos by Pat McKnight

ing in crude oil extraction has leveled off, Masterpole predicted mining for the sand will continue for some time.

"There's still plenty of interest in sand, depending on the market," said Masterpole. "The global energy demand drives the mining. The US is the number one oil producer in the world due to fracking."

Fracking, officially known as hydraulic fracturing is the method used to push crude oil out of the cracks in shale rock formations with a mixture of frac sand, water and chemicals pumped into oil shale formations to force the crude to the oil wells. The term "fracturing" connotes how the rock is fractured apart by the process.

Some 10,000 years ago, receding glaciers formed the sand and left deposits of it in the western and southern parts of the state.

Frac sand is generally mined from upland wooded ridgetops where soils are naturally rocky, thin and have low nutrient levels. To access the sand layer from a bluff or ridge, the mining companies remove layers of soil, known as overburden, and stockpile it until it's replaced after the sand layer has been removed.

"Reclamation success depends on soils," said Dolliver. "Soils are unique; we don't know a lot about them. Sandy soils make reclamation more challenging. A challenge can become an opportunity with a little creative thinking."

The researchers were particularly interested in the fine waste soil that is washed off the sand particles. The mix of fine particles and water forms a type of soil Dolliver referred to as mud or fines.

The researchers discovered the fine-particled mud has enhanced levels of metals, but they do tend to raise the moisture

Sand mine reclamation, continued on page 6

Insect research topic of October program

Creepy, crawly critters were in the spotlight at the October Friends of the Black River meeting. Along with getting to hold a Madagascar hissing cockroach and a close look at a rose hair tarantula, program attendees learned about native pollinators.

Although they created a buzz among meeting attendees, the exotic insects were a sidebar to the important message of the need to protect the native insects that play a vital role in the health of the environment.

Dr. Ted Wilson, biology professor at Viterbo University, and Ben Gibson, biology major and president of the college's Science Club, presented the program Oct. 10 in the Jackson County Bank.

"If native pollinators disappear, it would be an environmental disaster," said Wilson. "Everything has a role in the environment. If we get rid of all the mosquitos, the environment would collapse. I can't think of anything that doesn't have a complex role in the environment."

Gibson spoke about the "insect hotels" installed in various habitats in the La Crosse area to attract insects. The four different habitats where the hotels were placed were prairie, forest, marsh and urban.

Made by an Eagle Scout, the hotels are made of stacked pallets five "stories" high. The materials placed in the various levels were decaying wood or pine needles or other material favored by insects.

Each level has different natural materials to simulate various habitats that would draw insects to the man-made habitats. The researchers would visit the hotels and use sweep nets to collect insects within a meter-wide area around the hotel.

"Data can support that the hotels bring in biodiversity," said Wilson. "A lot of insects are using the hotels as nesting sites, and the hotels are also good habitat for snakes and mice."

Most of the insect species "checking in" at the hotels tend to be small such as mason bees. However, the researchers found other insect species in the area around the hotels including butterflies, beetles, dragonflies and damselflies.

The research is being conducted to determine how diversifying habitat can help increase insect populations, especially regarding pollinators. While the focus of news articles in recent years has been about honey bees and colony collapse disorder, those bees aren't native to North America and can be in competition with native pollinators.

"The pollinator question is a big topic," said Wilson. "The story has focused on honey bees, but what's bad for honey bees is also bad for native pollinators. If honey bees disappeared from the en-



Viterbo professor Ted Wilson (top left) and biology student Ben Gibson (top right) brought some exotic insects to share with attendees at the October meeting. Along with a rose hair tarantula, a Madagascar hissing cockroach was introduced to those attending the program (bottom photo). Photos by Pat McKnight

vironment, it would be an economic disaster."

The causes for the dwindling insect populations have been linked to the use of pesticides and destruction of habitat by development and agricultural practices.

"We've disrupted ecosystems," said Wilson. "We have issues with land use."

Answer to question on page 1:

Holding a rose hair tarantula didn't pose a problem for Dr. Ted Wilson when the Viterbo University biology teacher displayed the insect at the October meeting.

Prize winning fair photo



A black-and-white photo taken by Hannah Tubbs at Perry Creek Park received a grand champion placing in the junior category at the Jackson County Fair. FBR sponsors photography classes at the fair in both junior and open class.

Movie presentation, continued from page 3

Filming for “Decoding the Driftless” was done over two years with the project taking four years to complete. Howe indicated the production crew would likely submit the film for consideration for another Emmy; “Mysteries of the Driftless” was a 2014 Emmy award winner.

Howe encouraged attendees to learn as much as they can about the region’s uniqueness and work to conserve the unique features of the land.

Greetings from the president, continued from page 1

Our board will be setting up our schedule of activities at our January board meeting. We will probably schedule a snowshoe hike in January, so keep that in mind.

We will have our regular meetings on the second Wednesday of the month as usual.

So have a Happy Holiday season and join us in activities in the coming year!

~ Steve Rake

Sand mine reclamation, continued from page 4

level in the soils.

Over the five years of the project, the group has been able to raise prairie forbs and grasses on the reclaimed sections of the mine site. Small acreages can be worked on at a time because they have to be monitored and maintained. Along with the type of soils involved, weather conditions can be a significant factor in the success of the reclamation projects.

Both Masterpole and Dolliver indicated re-searching reclamation projects is a lengthy process, beginning before the extraction gets underway and then continuing with monitoring for decades following the initial reclamations process.

Charitable contributions assist FBR’s mission

Charitable contributions received by the Friends of the Black River will be used solely to support the goals outlined in the FBR bylaws.

The goals are:

- Educate members and the public about the ecology of the Black River watershed and threats to its health
- Promote sustainable use and recreation on the Black River and its watershed
- Increase public awareness and membership
- Promote sound decision-making when issues affect the health of the river and watershed
- Support the protection and improvement of

the Black River and its watershed for the benefit of the general public

- Develop a working relationship with local officials and collaborate with conservation organizations
- Promote improved health of the river and watershed through conservation projects and education
- Purchase land or easements for conservation purposes

Information about how to help FBR with its mission can be found on page 7 of this newsletter.

Ways to support FBR's mission

You can help support the mission of the Friends of the Black River by remembering FBR in your will or with memorials or honorariums. Checks can be made out to Friends of the Black River and contributions should be sent to PO Box 475, Black River Falls, WI 54615. Thank you.

Support of our mission is greatly appreciated

FBR sincerely thanks our members and other supporters for their continued dedication to FBR's mission to preserve and enhance the sustainable use of the Black River and its watershed.

Memberships always welcome

Memberships help Friends of the Black River continue its mission of preserving and caring for the Black River.

Show your support for that mission by renewing your membership.

If you are renewing your membership, you do not need to send in a membership form unless there has been a change in your contact information.

Please help us stay current

Please help us keep in touch by letting us know your new e-mail and/or postal addresses when they change. Send your e-mail address changes to info_fbr@yahoo.com

Become a new member by filling out the membership form below and mailing it with your membership dues to the mailing address listed on the form.

Support your watershed - Join the Friends of the Black River

Enroll me as a member

Membership Categories (check one)

- \$1.00 Youth (up to age 18)
- \$15.00 Individual
- \$20.00 Family
- \$30.00 Organization or Business
- \$50.00 Cornerstone Member

Name _____

Address _____

Phone _____

Email _____

I would like to give an additional contribution in the amount of \$ _____

I would like to give this membership as a gift
(Card will be sent to recipient)
Occasion _____
Name of recipient _____

Please check here ___ if you would like to receive a receipt.

Return registration and checks payable to:

Friends of the Black River
PO Box 475
Black River Falls, WI 54615

I'm interested in serving on a committee:

- Land Preservation and Advocacy
- Fundraising and Membership Recruitment
- Programming
- Cleanups and Special Events
- Landings
- I am Interested in becoming a board member

Comments/Questions:

