



TIMBERLINES

W. J. Breckenridge Chapter
Izaak Walton League
July 2024

www.breckenridgeikes.org



Coming Events

July 2024

- 9 Board of Directors Meeting 7 pm
- 23 *Social Educational Meeting 7:30 pm
John Moriarty, Three Rivers Park District
Minnesota Turtles: Highlighting the Turtles of Banfill Island and Surrounding Area

*Construction has limited travel on West River Road to southbound only. See p.6 for a detour map if you come from the south

August 2024

- 6 National Night Out – Chapter House 5:30-8 pm
- 13 Board of Directors Meeting 7 pm
- 27 Social Educational Meeting 7:30 pm
Angie Hong, Water Education Senior Specialist: Exploring the St. Croix River Valley

September 2024

- 10 Board of Directors Meeting 7 pm
- 24 Social Educational Meeting 7:30 pm
Rep. Samantha Vang (DFL) District: 38B

October 2024

- 8 Board of Directors Meeting 7 pm
- 22 Social Educational Meeting 7:30 pm
Lee Ann Landstrom, Interpretive Naturalist: Costa Rica

**Social Educational Meeting:
Tuesday, July 23 7:30 pm
John Moriarty, Three Rivers Park District
Minnesota Turtles: Their Natural History and Management**

John Moriarty, the senior manager of wildlife at Three Rivers Park District, author of several books on reptiles and turtles, and a longtime member of the Breckenridge Chapter, will talk about the eleven species of turtles found in Minnesota, their natural history, and conservation efforts. The turtles of Banfill Island will be highlighted along with Breck's work on the softshells from the 1950's. Recent changes in turtle trapping regulations will be discussed.



American Elm Restoration in North America



Our Chapter was pleased to hear Linda Haugen present a talk about the American Elm restoration project she has been involved in for many years during her 30-year career with the USFS. Recently retired, but still involved with the project, Linda has moved to a new home overlooking the Ike's first success story, the Upper Mississippi River National Wildlife and Fish Refuge and is interested with others in establishing another chapter of the IWLA along the river. Accompanying Linda in the presentation was researcher Melanie Moore, also with the USFS, who brought samples of elm trees she has grafted and cloned for the audience to view.

Minnesota has three species of elm, all susceptible to the Dutch elm disease (DED) fungus. The disease was brought to North America around 1930 in logs from Europe whose own elm trees had been ravaged earlier by the pathogen, origin unknown (it was named for the country in which it was first identified). The insects responsible for the spreading the fungus, elm bark beetles, both native and exotic, are attracted to dying elm trees when they become infected and then move on to the healthy trees in the canopy where they spread the infection. If elm grow close enough to each other, they can also spread the fungus to each other through root grafts so it is important not to plant any of the resistant clones available too close to one another.

The elms are very adaptable and were especially important in the floodplain canopy from an ecological perspective. Our Chapter's property, both

on Banfill Island and on the higher shore around the Chapter House, saw the loss of all the mature elm, both American and Red, over the past fifty years. Linda estimated that over a quarter of the canopy of eastern North American forests was elm. Elm leaves were an important food source for many butterfly larvae and provide early seed to birds (like orioles). For a good article on their importance Linda recommended [The ecological role of American elm \(*Ulmus americana* L.\) in floodplain forests of northeastern North America.](#)

Currently there is a vibrant population of elm "stems" and the goal is to get them to persist longer (DED will likely kill even resistant elm eventually) on the landscape to fill the ecological gap left both by the loss of mature elm to DED and the current catastrophic loss of ash to the emerald ash borer. To accomplish this, researchers continue to seek out "survivor" elms (over 24 inches in diameter (oldest elms are over 40 inches diameter) and probably between 80-150 years in age) which hopefully have not just been lucky enough to avoid exposure, but have true resistance. There is a website for reporting such trees. Only since the 1990s has some resistance been found.

It takes 10-15 years to test (first find a survivor, propagate, plant, inoculate, get results). Once survivors are identified, buds are taken from the canopy in the winter and grafted onto rootstock which are derived from enriched seedlings (leftover from inoculant resistant trees in 2012). Both parents are thus likely resistant. Actually, since the cuttings for cloning are taken from above, it shouldn't matter what the rootstock was.

These cuttings with about three leaves each (leaves trimmed to half size to decrease transpiration) are placed in a medium enhanced with rooting hormone and placed under timed misting until ready to be planted out on one of the research sites (central WI, upper MI, upper Mississippi River). The populations will vary in their cold tolerance and other local factors so this is why Linda and her colleagues in the USFS have worked in the Midwest while others work further east.

Finally, after about seven years, the young trees (over an inch in diameter) are drilled and injected with a pipette of DED inoculant to see if they are

resistant. If they show resistance they are also evaluated for other properties like cold-hardiness, shape, maintenance requirements and ease of propagation. A few varieties of these cloned species are available on the market today, and in fact, a sister IWLA chapter, Minnesota Valley, has planted some on their property recently.

Crossing American elms (whose chromosomes are triploid) with other resistant elm species (which are tetraploid) has not proved successful even though the invasive Siberian can hybridize with Red (slippery) elm.

The ultimate goal would be to develop resistant seeds which could be broadcast widely in forests. Elm seeds don't need cold stratification so they mostly germinate right away that first year.

Our membership should keep up on progress in this work and recommend if and when we should invest in restoring American elm on our property.

Reported by Tim Johnson

July Haiku

From: *one day and three lines at a time:
a year of nature haiku*
by John Moriarty

*Karner Blues flutter
Move from flower to flower
Small live sapphires*



More Scholarship Recipients

By Jim Arnold

Two more students of the six students recently selected by the scholarship committee outstanding students for the coming school year were able to attend the June IWL meeting.

Nicholas Mertens will be entering his senior year at St. John's University this fall. His outlook on environmental careers has changed from working on nonprofit climate related organizations within Minnesota or Washington DC. He now is more interested in working in the Middle East to lessen oil production and encourage green technology. Nicholas lists possibly working for employers in Riyadh, Saudi Arabia, Dubai, United Arab Emirates, Muscat or Oman. In his senior year Nicholas plans to research renewable energy in petrol-dominated regions like the middle East.

Noah Thelen, a graduate of Anoka High School, will begin his sophomore year at the University of Minnesota this fall majoring in Fisheries, Wildlife and Conservation Biology. He is also interested in adding an additional area of study such as Protected Area Management or Environmental Sciences. Possible career goals for Noah may be a fisheries research biologist with the Minnesota Dept. of Natural Resources or U.S. Fish and Wildlife Service. He is also interested working with waterfowl or upland bird species. Noah is very involved in many local environmental projects such as Friends of Lake Hiawatha, and wood duck house maintenance.

Clair Koch, who will enter her junior year at the University of Minnesota and **Audrey Komann**, entering her Sophomore year at New Jersey Institute of Technology are both attending internships this summer and unable to get back to Minnesota.

Opinion: Our Speaker Stirs Memories of Yore

By Dick Brown

Our April speaker, long time member Peter Sorenson gave a very interesting talk about what most people don't know about the vast quantity of fish species in Minnesota. I was especially interested when he spoke of the decline of most species, especially game fish since about 1920.

In about 1933 (I was 6 years old) our family began a series of fishing trips to Crow Wing Lake No. 8 near Park Rapids, Minnesota, close to the town of Nevis. Most of the forests in the area were second or third growth, but it was quite wild near the lake. The dirt road that only went part way around the lake was seldom traveled and the only house seen near the lake was quite old and on the other end of the lake a farmer nearby owned a pasture across the road from the lake which was scantily used by his cattle. For about 2-3 dollars he allowed us to pitch our 9'x11' white sidewall army tent in the pasture (these were the depression years). We pitched about 50 feet from the road which was about 30 feet from the lake. The farmer had installed a 2-plank dock about 12 or 14 feet long upon which he moored 2 homemade flat bottom boats, rented for about \$1 a day. Our trips consisted of 3-5 day periods and it took most of the day to get there from our home in south Minneapolis.

Our transportation was a 1932 Chevrolet rumble seat coupe from which Dad had removed the rumble seat and converted it into a small pickup truck. A one wheeled trailer which attached at 2 points on the bumper completed our transportation mode (a few years later these one wheeled, castor like trailers became prohibited). The trailer box was only about 3 or 4 feet square and probably 16 inches deep.

We would generally go fishing twice a day and Mom always had Dad or me remove the fish from her hook. In the heat of the day, we usually

followed an old tote road into the woods and picked berries. Pin cherries, chokecherries and June berries were abundant depending on whether we were there Memorial Day, Fourth of July, or Labor Day.

In those days, few people transported their boats with them, but rented them at resorts. With no resorts on Crow Wing No.8, there was hardly any pressure from fisher people. Fishing was great!

Our main water transportation with the rented boat was 2 oars for trolling and Dad's 2.7 horsepower Johnson Sea Horse outboard motor. Although I don't remember catching walleyes, we caught some Northerns, but mostly large crappies, bass and blue gills with a few perch. We always caught more than our ice box would hold so we spent most of the time letting fish go. Worms were a common bait but bucktail flies and a June bug spinner with a little pork rind on the hook caught the big ones. We always took a snack along which included green grapes. We found a bare hook with a grape on it would even catch largemouth bass, crappies and sunfish.

Today Crow Wing No.8 looks like a suburban city. Houses, "cabins", black top roads all around the lake, large boats docked at super large docks; I could not recognize the lake of my youth! I wonder how fishing is with or without constant artificial restocking, and I wonder if re-stocked fingerlings ever get to the size and abundance of the fish of yore?

Peter Sorenson's great program about the scarcity of big and many fish today brought me to reminisce. With more people today with such sophisticated equipment, there will probably never be the great fishing there was in the days of Will Dilg, our IWLA founder of the 1920's, and even then it was noticed that the quality of fishing was going downhill! In this respect we have progressed to the point of depressing.

April 2024

Shocking!

This article is a synopsis of an article in the May 27 issue of The New Yorker written by Sharon Lerner. Synopsis by Karen Ostenso

PFOS and PFAS have been in the news a lot in the last few years. They are 2 separate but closely related chemicals and there are many others in the same class. They were created, and are used extensively, by 3M beginning in the early 1950s. They had been originated at the Manhattan Project during WWII, but not used commercially until 3M got involved and are commonly referred to as “forever chemicals.”

As early as the late 1970s, 3M experimented with giving PFOS to rats, and learned that a moderate dose killed the animals. A confidential 3M report in 1971 noted that a respected toxicologist recommended researching whether the chemicals were found in humans. In the early 1980s, a 3M scientist recommended against using PFOS in toothpaste and diapers. The information remained secret.

3M sold PFOA to DuPont in the early 1950s for use in Teflon. Later 3M developed Scotchgard and Scotchban, both made with PFDA. It is used in fire-fighting gear, guitar strings, dental floss, makeup, hand sanitizer, brake fluid, ski wax, fishing line, and many other products. Between 1951 and 2000, 3M produced at least a hundred million pounds of PFOS and chemicals that degrade into PFOS.

In 1977 a 3M scientist looked for forever chemicals in human blood. She found no blood samples WITHOUT them. She checked Red Cross blood from many locations, and Swedish blood samples from 1959. All contained PFOS. She eventually found samples drawn before PFOS was marketed. And found no PFOS.

Human health issues that have been linked to PFOS and PFAS include developmental problems, immune system problems, liver diseases, cancers, increased rates of infectious diseases and food allergies, fertility dysfunction, poor fetal development, and thyroid dysfunction.

EPA requires that companies report findings that their products may present a risk to people or the environment. 3M told the EPA for years that it believed its products presented no substantial risk to either. Not until 2000 did 3M report detecting it in blood bank samples and claimed it was a “complete surprise.” In 2002, they announced they would replace PFOS and PFAS with PFBS, a chemical of the same general makeup. Developmental and reproductive irregularities occur in animals subjected to PFBS.

Recently, fetuses from terminated pregnancies were tested. Forever chemicals were found in them.

In April of this year, the EPA declared that there is no safe level of PFAS or PFOS in humans. Utilities will be required to test for these chemicals in water in a few years. 3M has been fined 12.5 billion dollars to be used to filter out the chemicals. In 2022, 3M said it would stop making PFAS and work to discontinue them by the end of 2025. The company said 16,000 (!) of its products contain PFAS. A full phase out will not happen if substitutes cannot be found.

For background about the process that exposed this tragedy, a movie called “Dark Waters” was made in 2019. It is available on Netflix.

We still need volunteers to provide refreshments for our Tuesday meetings on the following dates:

July 23 – Cindy Olsen
August 28 –
October 22 –
November 26–

Please text or email
Barbara Franklin to volunteer
763-242-0432
bbfrankli@gmail.com

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If you would like to submit an article for the Timberlines, please send it to
Barbara Franklin at: bbfrankli@gmail.com
Deadline is the First Day of each month.

All articles in this newsletter do not necessarily reflect the position of the Breckenridge Board of Directors. The Editor reserves the right to edit material as necessary.

Road Closure: Northbound West River Road

Thanks to Josh Wildt for this alert.

A northbound road closure on West River Road from Brookdale Drive to Newton Avenue will affect getting to the Chapter House from the south. The closure begins May 20 and will last through July. Southbound West River Road will be open between Newton Ave and Brookdale Drive throughout the duration of the project with a lane shift occurring to enable the contractor to work on the opposite side of the road.

Use this detour from Highway 252 and 85th Avenue N.

- From 85th Ave, turn left onto Dupont Ave, heading N.
- Follow the street as it turns into 86th Avenue N, and then Girard Avenue N.
- Turn right onto 88th Ave, heading East to West River Road.
- Turn right onto West River Road to enter the IWLA driveway

The northbound detour runs along TH252/TH610/Noble Ave/97th Ave. People needing to access West River Road south of 85th Ave can also use 85th Ave instead of running through the full detour.

