



TIMBERLINES

W. J. Breckenridge Chapter
Izaak Walton League
July 2021

www.breckenridgeikes.org



COMING EVENTS

JULY 2021

- 14 Board of Directors Meeting 7 pm
- 27 Social/Educational Meeting:
For Love of a River –
Darby and Geri Nelson 7:30 pm

AUGUST 2021

- 3 National Night Out
- 10 Board of Directors Meeting 7 pm
- 24 Social/Educational Meeting:
Rough Fish Awareness – Tyler Winter
7:30 pm

In Memory...

In the last month the Breckenridge Chapter has lost two of our prominent members who have made vital contributions, both financially and in terms of their love of conservation. We remember fondly both Larry Swanson and Lyle Bradley. They will be sorely missed. See articles elsewhere in this issue.

Get Well, Mike!

Our condolences to Tom Reid's son, Mike, on the serious injuries he sustained while cutting down Ash trees early last month. After surgery he is out of North Memorial hospital now, but recovery will be a long process. Best wishes for a rapid recovery.



Clams in Our River are Important

By Tim Johnson

Our current state of drought across much of Minnesota has lowered our beloved Mississippi River so much that we can walk across to Banfill Island and hardly wet our feet. In doing so, we see the many mussels (clams) that have been stranded and died or face imminent death in the shallows if the river does not soon rise. Clams prefer water 1 to 2 meters deep. Raccoons, opportunistic clam and crayfish predators, have no doubt been feasting to their heart's content.

Being able to see the great diversity of clams lying all over the riverbed led me to try to educate myself a little about these animals. Their story is fascinating. Freshwater mussels as a family, share many attributes while the individual species each have their interesting niche. They all have growth rings on their shells, just like trees, which makes us able to tell their ages. Some live over a century. In our section of the river (SAF pool, between the Coon Rapids Dam and the St. Anthony Falls), malacologists (those who study mollusks) have determined that the clams are relatively young, born since the river was cleaned up in the 1980s.

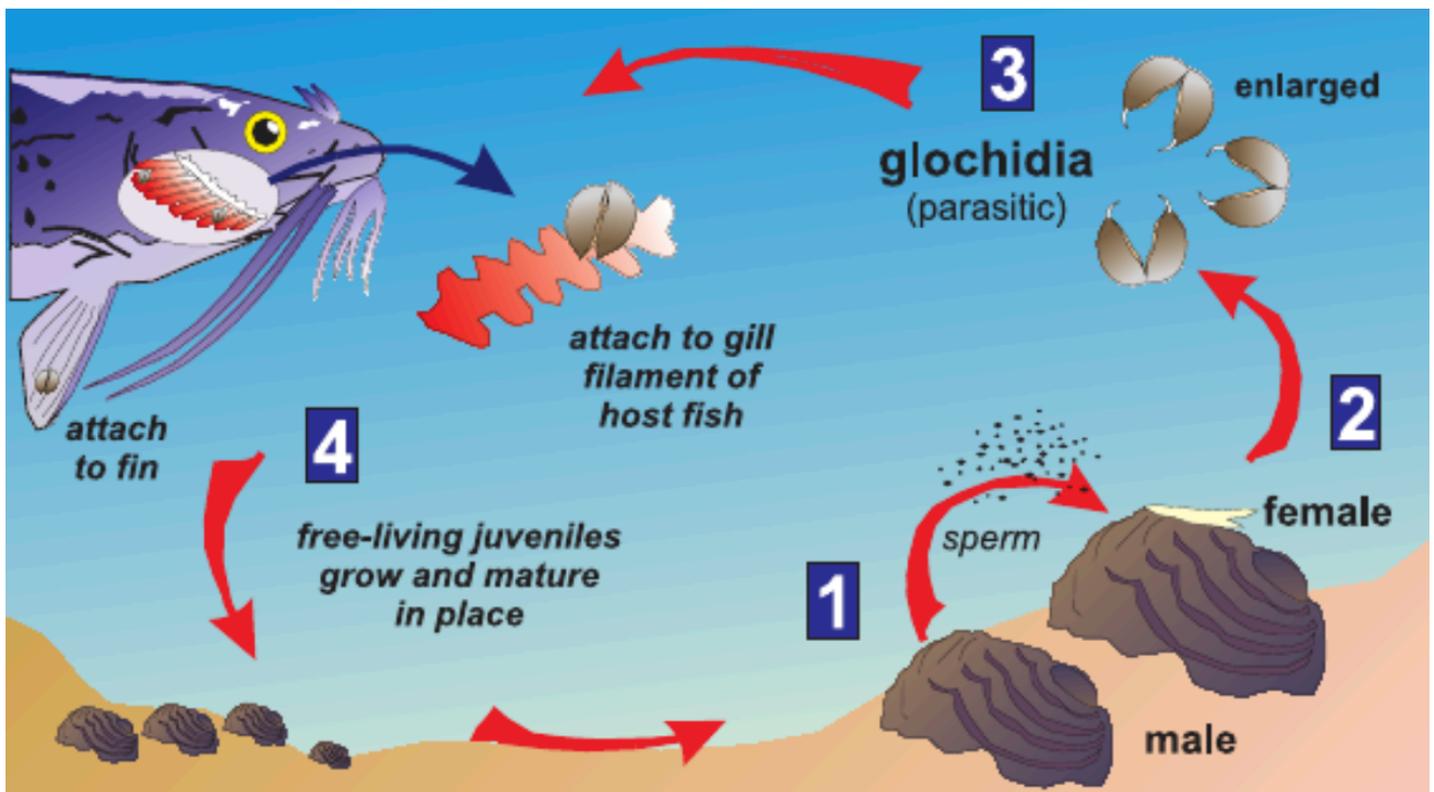
European settlers and their progeny used the river as a sewer and poured untreated waste into it. Not until the late 1970s were sanitary sewers separated from storm sewers following a successful citizens' campaign. Faulty septic systems leaking into the river all along the banks were also cleaned up. St. Cloud was a notorious polluter. The logging industry ripped up good sections of the river bed in the SAF pool. Between pollution and dredging for barges, clams were pretty much extirpated in the 72 mile section of the river now part of the Mississippi National River and Recreation Area (MNRRA). In

1980, no live mussels were found between St. Anthony Falls and the Ford Dam.

North American bivalves first appear in the fossil record 250-200 million years ago, the Triassic Era (think dinosaurs). They have had this enormous amount of time to evolve to fit their niches. Historically the species found above St. Anthony Falls in the SAF pool resembled that of the more northern sections of the river and its tributaries. This can be known by finding the old shells still in the riverbed. Now however, not only have the northern species repopulated the cleaned up river in the MNRRA, but new species were added back from the south as fish and the baby clams they carried on their gills (larvae called glochidia) swam, gradually, over a few years, from around the less polluted St. Croix River, up to and through the St. Anthony locks. That connection has now been closed in order to stop Asian Carp from moving upstream. These southern species of mussels are now confined to the waters below the next obstacle (this time a man-made one) the Coon Rapids Dam. I speculate that over time (maybe post Anthropocene) this obstacle will crumble and the new SAF pool mussel species will have their path open to the

upper reaches of the river until the next glaciation wipes them all out again.

The natural history of mussel reproduction is fascinating. All members of the freshwater mussel family Unionidae (270 species in North America) share this remarkable innovation. The males release sperm into the water and the females draw them in through their siphons. The fertilized eggs (each female produces millions of larvae but perhaps two in a million will survive) develop into glochidia which resemble small clams and are brooded in the female's gills where they are held for days to months depending on the species. For the next stage of their lives, the glochidia must attach to a vertebrate host they parasitize harmlessly for a period of weeks to months. Usually this will be on a fish's gills but it may also be on fins or other exterior parts. Some mussel species require a certain species of fish (such as minnow or catfish) while others are host generalists. The specialists have developed amazing ways to attract the right species of fish to attack them, enabling the clam to release their glochidia into the fish's mouth. When the glochidia's organs have developed, they drop off to start the rest of their lives on the river bottom.



In the MNRRA survey of 2000-2001, sixteen live clam species were found in the SAF pool. Of those, ten were not historically present in the pool. The community was dominated by the Deertoe 25%, with three other species abundant: Mapleleaf 13.9%, Plain Pocketbook 12.2%, Pink Heelsplitter 11.3%.

DEERTOE



MAPLELEAF



PLAIN POCKETBOOK



PINK HEELSPLITTER



Ironically, the Mississippi River between the Twin Cities and Hastings, MN, once nearly a dead zone, may now be one of the last big river mussel refuges in the Midwestern United States and our SAF pool waters which surround Banfill Island have one of the best multi-species mussel beds in this section.

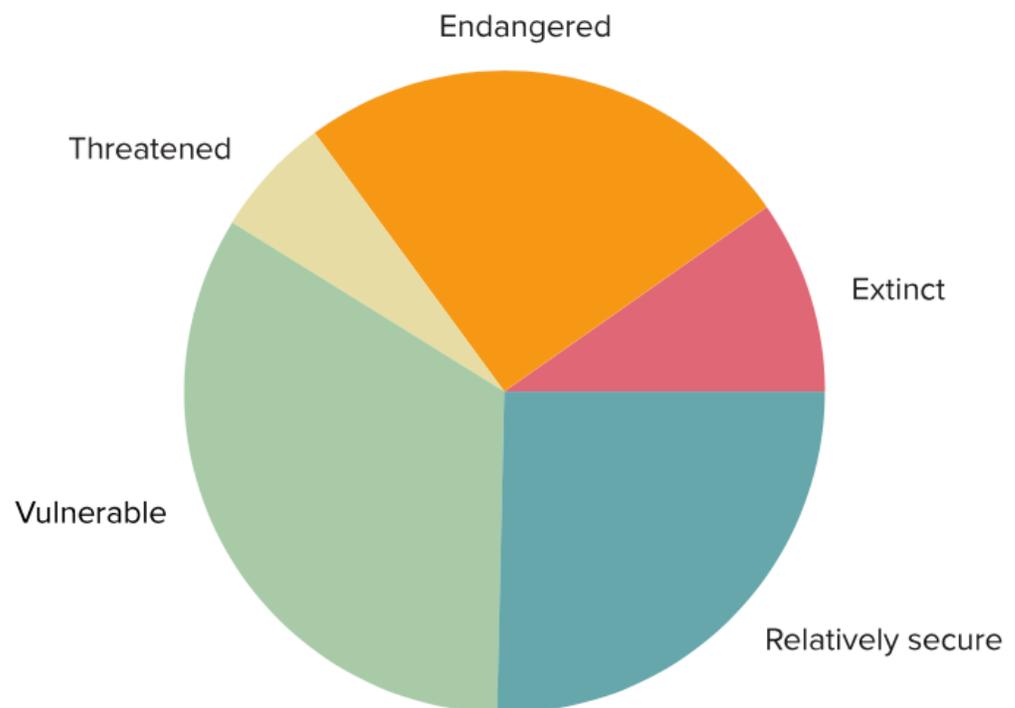
However, the exotic and invasive zebra mussels from Russia were accidentally brought into the Great Lakes in ballast water in 1991 and then spread into the lower Mississippi River. They have been working their way upstream now for years. When present, they smother natives, out-competing them for nutrients. They will eventually kill our native mussels. Unfortunately, before the St. Anthony locks were permanently closed, zebra mussels were observed in the chambers. We haven't observed them on any of the clams or stones seen on the river bottom in recent weeks so hopefully they are not reproducing in our pool. But all it will take is one

careless boater to bring them into our pool and change things forever. The State of Minnesota is investing more in boat cleaning stations at put-ins, the most recent of which was added this year at the River Park landing a mile downstream of Banfill Island. Some have suggested stricter laws, banning the movement of boats between water bodies altogether and that may be the only way to really save our native mussels in the long run.

Mussels are important in North American river systems for various reasons. They clean the water (each clam can filter up to ten gallons of water each day) allowing sunshine to reach deeper so plants and other species can survive on the river bottom. Shells provide spawning sites and habitat for various fishes and insects like caddis flies. I learned that as filter feeders, “mussels are primary consumers of plankton and are important in the food web of large rivers. They convert and accumulate nutrients from plankton and bacteria into proteins that are directly used by fishes and other invertebrates. Because they are quite sensitive to changes in habitat and water quality, freshwater mussels are good indicators of changing environmental conditions.”

Unfortunately, In North America alone, 30 freshwater mussel species have gone extinct over the last century, and 65 percent of those surviving are considered endangered, threatened or vulnerable — primarily due to the large-scale damming of rivers.

Proportion of imperiled US freshwater mussel species



While researching clams I came across a biography of an interesting woman from our region. It should be encouraging for all of us amateurs to know that a registered nurse from Lacrosse, WI named Marian Havlik became the self-taught internationally known expert on fresh-water mussels that helped save many of our upper Midwest clams, including the endangered Higgins eye. They called her the “Clam Lady”. Like her, we should all aspire to do our best in learning about and conserving the natural world around us.

We will add photos of the clams we have seen recently near Banfill Island in the Breckenridge Chapter Facebook page. Please add your own photos if you like, especially of species not already shown.

Minutes - Breckenridge Chapter IWLA BOD meeting minutes June 8, 2021

In-person board meeting called to order. Members present: Steve Schaust, Dick Brown, Tim Johnson, Barb Franklin, Wendy Steele, Karen Ostenso, Jim Arnold. Jerry Steele (8pm)
IWL Membership pledge recited, agenda was passed out as well as a copy of the treasurer's report.

Chapter Upcoming Schedule

- First Social/Educational meeting will be July 27: Gerri & Darby Nelson are scheduled speakers. Their books will be available for sale.
- Scholarship recipients have been invited to the meeting – they will be presented prior to the speakers.
- *Future speakers are still being sought for Social/Educational meetings.

Chapter Award

Dave Zentner MN Defenders Award IWL Breckenridge 2020. Plaque will be situated with others. A Fundraising form for donations to the MN Scholarship fund was presented, Tim moved to donate \$100 to the State Scholarship fund, seconded by Barb. Vote passed with one abstain.

Stream Monitoring

Tim will be in touch with organizer, Mary Karius, to find out dates and have an "interest" email sent out to membership.

Oak tree preservation

Trees along Jefferson highway. Dick, John Rust and Steve (& Todd Larson) will meet with owners (church) to learn their intentions and hopefully preserve for future generations as natural land.

Chapter House & Grounds

EAB Committee

Tim will head committee. We decided unanimously to spend up to \$600 to treat 4 of the larger trees. These have been marked with red tape. Tim will also contact electric company to find out if they will take down Ash trees to the level of power lines.

Rentals

June is busy; July somewhat less. Fall and winter should pick up with holiday celebrations. Spread the word about rentals whenever we can.

Treasurer's Report – (Jim)

Accounts are still looking healthy and scholarship endowment doing well.

Timberlines

Costs for printing have been higher lately. Membership form to be included in the *Timberlines* when space permits. It is always available on the website. We all need to work hard on getting additional members and get thinking about creative ways to bring in new members.

Chapter House Rental Rates

Non-Members:

(damage deposit: \$300.00; \$200 for previous renters)
Monday through Thursday \$275.00
Friday, Saturday, Sunday & Holidays..... \$350.00

Members:(damage deposit \$100.00)

Monday through Thursday\$125.00
Friday, Saturday, Sunday & Holidays..... \$175.00

Boy Scouts:(damage deposit \$50.00)

Overnights.....\$50.00*

Rates and terms subject to change without notice;
please contact the Chapter for special circumstances.

Rental Chairperson: Tim Johnson
(Leave messages at 763-561-5364)

Deer exclusion fence is set up. Look at difference when you get a chance. It is remarkable.

Lawrence C. Swanson November 28, 1936—June 15, 2021

Lawrence (Larry) Carl Swanson died at the age of 84 on June 15, 2021 while on a bicycle ride with his wife, Sharyl, in the Black Hills of South Dakota. Larry was born and grew up in Minnesota and attended the University of Minnesota, graduating in Mechanical Engineering in 1959. He moved to Utah and worked in the aerospace industry, with several year-long stints in Germany and Hungary. He met Sharyl in Germany while they both were working as civilians associated with the military.

Larry lived an adventurous life. He loved riding motorcycles and earned trophies as the Minnesota off-road motorcycle racing champion for four years. In Utah, he served as a ski patrol member at Solitude and Park West ski resorts for over 30 years. He was a small-plane owner and pilot for some 60 years. For Angel Flight, he flew 51 volunteer missions to and from Salt Lake hospitals and Southern Utah and Arizona and, reportedly, he was “the first to step up.” He also flew 52 flights for LightHawk, a conservation flying nonprofit.

He sailed, kayaked, explored Southern Utah and Baja, and avidly cross-country skied through the last snowfall of each season. He accomplished many rock and ice climbs in the Wasatch, Wind River, and Teton Mountains, as well as Mt. Rainier in Washington and peaks in Alaska, Canada, Peru, Ecuador, and Bolivia. Larry reached the summit of a high peak in the Pamir Mountains of Tajikistan. With a group of friends, Larry and Sharyl trekked across the high Arctic’s islands of Ellesmere (1989) and Axel Heiberg (1995).

In the US and abroad, Larry and Sharyl put over 19,000 miles on their “take-apart” tandem bicycle. On thirteen overseas trips, they pedaled throughout Europe, Ireland, and the South Island of New Zealand.

Larry was known for his enthusiasm which led him to many adventures and always seemed to carry him through. He often hauled a watermelon in his pack on local hikes for everyone to enjoy on the mountaintop. For 49 years, he established,

organized, and led a one-day, round-trip ski tour up Kings Peak, the highest peak in Utah.

Larry was a reader and, after teaching himself to read German, especially enjoyed adventure books in that language. His generosity was manifested in many ways, such as clearing the neighbors’ drives after a snowfall and circling the block with his snowblower to clear the sidewalks. He assisted in various repairs for friends and regularly filled their birdfeeders. Working on the Wasatch Mountain Club Lodge kept him busy over the years. Larry had a very positive influence on his many friends and on the world in general. He touched the hearts of so many and will be missed by all who knew him.

Larry is survived by his wife, Sharyl, his brothers, Don and Steve Swanson, nephew Eric Swanson, cousins Betty Maxe Larson, Harlan Hanson, and other family in Minnesota and Utah, as well as Sharyl’s family in Utah and Washington State.



A Celebration of Life will be held on Saturday, September 18th, from 5-7pm, at the Starks Funeral Parlor, 3651 South 900 East, Salt Lake City, UT. Online condolences may be offered to the family at www.starksfuneral.com. In lieu of flowers, consider a donation to Angel Flight, LightHawk, or a conservation organization of choice.

The Swanson Family Legacy

Larry Swanson's obituary, located in this issue of *Timberlines*, references his early years as a member of an active outdoor family in Minnesota. His father, Carl, was an early member of the North Minneapolis Izaak Walton League Chapter. When the North Minneapolis Chapter purchased the current property in Brooklyn Park at 8816 West River Road a number of Chapter members purchased lots in the same area; Carl and Irene purchased property just two lots north of the current Chapter. In those first few years the family built a garage and lived there while they built their home.

Carl and Irene remained active members and Larry and his two younger brothers spent much of their formative years exploring the river. After college they all ended up with successful careers in the Salt Lake City area where they spent much of their leisure time in the mountains. They were all active in a number of environmental programs there. After Carl died they often returned to help their mother with a variety of projects. When Irene died they learned that the Chapter had recently started a scholarship program and donated a significant part of funds from her estate to begin an endowment fund for the scholarships. Every year, after the endowment was established, Larry made generous contributions. He also was a member and enjoyed reading *Timberlines* to keep track of his old neighborhood. Larry was a wonderful example of his family's commitment to the environment.

**With in-person meetings resuming, let me know if you'd like to bring treats for an upcoming date. The schedule is now posted on our website:
breckenridgeikes.org
Barbara Franklin
763-242-0432
Or bbfrankli@gmail.com**

Breckenridge Chapter Membership Application:

Name: _____ Date: _____

Address: _____

Phone: _____ E-Mail: _____

Dues are subject to change. Please make check payable to: IWLA, Walter J. Breckenridge Chapter Membership
Dues: Individual: 71.50 Family: 99.00 Student: 43.00 Mail to: Mary Ellen Vetter 7715 York Lane N Brooklyn Park, MN 55443 Phone: 763-561-1761

Lyle R. Bradley November 22, 1924 – June 7, 2021

Lyle Bradley passed away peacefully with family at his side on Monday, June 7, 2021. A longtime conservationist, Lyle was a beloved Science Teacher at Anoka Senior High School from 1955 until he retired as the District 11 Science Consultant in 1984. He was a member of the Breckenridge Chapter of Izaak Walton for many years. He is survived by his wife, Carol; 5 children, 11 grandchildren; many great-grandchildren; nieces, nephews, extended family and friends.

Lyle was born November 22, 1924 in Dubuque, IA to Roy and Blanche Bradley where he developed a love for birds and fascination with flight that was central to his life. As young man Lyle went off to war in the Pacific flying the F4U Corsair in WWII, and continued his service in the Korean War and many years in the Marine Reserves, retiring as a Lt. Col. after 42 years. In 1954, Lyle met Carol at a teacher's summer school class in Duluth, MN. They were married June 25, 1955, established their homestead on the Rum River in Grow Township, outside Anoka, MN where they raised their five children and resided until the end.

Lyle was a beloved Science Teacher at Anoka Senior High School from 1955 until he retired as the District 11 Science Consultant in 1984. He will be remembered by hundreds of AHS students for the famous Summer Biology Field Trips, every summer from 1961 - 1983, where he was known affectionately as Bugs. It was through a field trip to Wyoming that he discovered the dinosaur site the Science Museum of Minnesota has on display. Throughout his life, to the end, Lyle was a committed citizen having served on the Metropolitan Airport Commission, the Minnesota Zoo Board, local Grow Township government before it was the City of Andover, Community Ed

Ornithology classes, started the Wood Duck Society, belonged to a writers group and a published co-author of a book called *Marine Wings*.

We will miss you, and have peace knowing you are flying with the birds and planes. Memorials received will be used to establish a scholarship in his name at Anoka High School. Lyle lived a full and eventful life that cannot be expressed with these few words.



A Celebration of Life was held Saturday, June 26 at Golden Wings Museum at the Anoka Airport.

A member of the Breckenridge Chapter for many years, Lyle exceeded Breck's 100th birthday celebration and has presented some enjoyable programs for the Ikes, including his memorable appearance as the oldest living member of the Lewis and Clark expedition.

Trash Pickup

A dozen or so volunteers walked the perimeter of Banfill Island last Sunday afternoon picking up trash. The heavy stuff was left on the riverbank to be picked up by canoe at a later date when the river rises from its current very low level. Overall the island was pretty clean. Flotsam the spring floods bring in, the next floods often carry out. People do occasionally illegally camp on the upstream end of the island and leave trash behind. Thanks to all who helped with cleanup!



W. J. Breckenridge Chapter
Izaak Walton League of America
8816 West River Road
Brooklyn Park MN 55444



If you would like to submit an article for the Timberlines, please send it to
Barbara Franklin at: bbfrankli@gmail.com

Deadline is the last 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.



Join Us for National Night Out Potluck
Tuesday, August 3

5:30 – 8 pm

Breckenridge Chapter, Izaak Walton League
Bring a dish to share!

We need volunteers!

If you can help with any of the festivities please contact
Jim Arnold

(763-560-8972 or jjarnold@q.com)