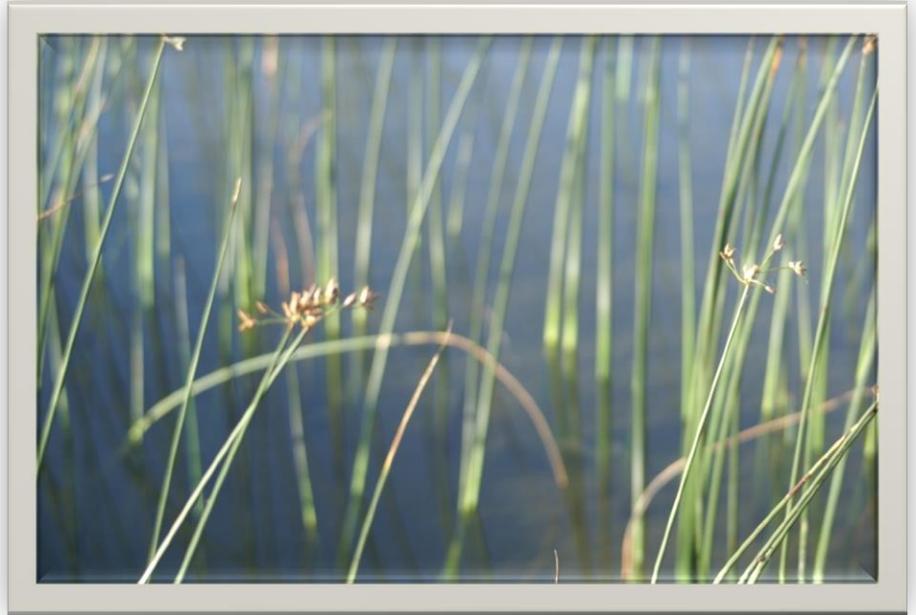


For Those That Follow



When we were kids, we spent most of my Dad's vacation time at the lake. We were infatuated with the water. We had an 18 foot aluminum canoe that saw a lot of use. The family fished from it. We floated the stream in it, loving the chance to see the yellow-headed blackbirds up close and personal. We kids played with that old canoe, submerged in the water, or turned upside down. A sail of sorts was constructed from an old shower curtain and wooden braces, and on windy days we'd paddle out as far as we could against the waves, and then sail on in.

From time to time, my mother and I would go for a paddle, and haul that canoe up, over the narrow sandy shore that separated "our" lake from the wetland behind it. There it was we might explore a whole other world... one that included a colony of black terns, and the scattered nests of red-necked grebes. I enjoyed paddling through the lily pads and watching the lucky bugs, the ones that live on top of the water; sometimes bunching up, other times scattering far and wide. I recall one morning thinking that I could study such things for the rest of my life. I knew then what lies in my core.

The lake I frequent nowadays is a smaller one that lies within the boundary of the Chippewa National Forest. It is one of those that are primarily surrounded by private ownership, there being but one isolated tract of federal land along the shore. Many hours have I shared with my children here, swimming or fishing, or just enjoying being near the water.

I love to spend the early morning hours taking coffee on the dock. I enjoy the peace of the quiet; the laugh of the gulls. Today I share the space with a dragonfly. Gone is the guy driving the tri-hull with the huge motor, pulling his kids around on a couch-like inflatable named "Mr. Big". Still in bed is the neighbor's visitor who brought the jet-ski. Clearly he is not a peace-seeker. This morning is so still the lake is as glass, and you can see down through the clear water...that beautiful, inviting water.

You can see the freshwater mussels sticking into the sand, the foot end firmly anchored; open just enough to filter water through and feed. You can see the aquatic plants, reaching up towards the sunlight. The pondweeds and the coontails. Look there – that’s a baby bass, and some tiny perch. A school of sunnies comes in. On quiet wings, a great blue heron soars in past me, landing in the shallows.

A curious loon floats nearby, poking its head into the water. She needs clear water in order to see the fish she catches underwater. Behind me another fish-eater, a kingfisher flies past, his rattle calls following him into the distance. Every now and then a large snapping turtle floats to the top, his big head breaking the glass as he takes a breath of air. Fish are jumping this morning, and their splashes punctuate the quiet. Another kind of splash draws my eye to an eagle over yonder. It labors at the surface of the water, flapping its big wings and dragging a fish along the top. Finally it drops the fish. In about half a heartbeat, a gull is all over that fish.



The bulrushes are yellowing, but the water is still warm. The world’s most water-loving dog, my golden retriever was in swimming before 6 a.m. this morning and has left now for work with the logger. She and her son will hang out in the truck until lunch time, when the machinery shuts down and she wanders from guy to guy, rewarded by tidbits of lunch. My husband says she goes to the highest bidder. The old girl is slowing down, but she becomes half-way young again when she can get in the water.

She loves to dive off the end of the dock, and chases fish (real and imagined) in the shallows as many hours as there are in a day. She swims so much, at times she smells positively moldy. On hot days we join her. On cooler days Sidney may swim alone, the tired man reclining in a lawn chair, watching the osprey dive for fish.

Lately there’s been quite a bit of talk about lakes that are not as nice as this one. Most of the lakes in the southern two thirds of the state are not as nice as this one. When it comes time to pass around the “restoration” funding opportunities, some say those lakes are not worth saving. They are too far gone. Agricultural drainage and pollution, massive shoreline development, high nutrient loadings coming from urbanization, green lawns, faulty septic tanks, and loss of natural shoreline vegetation that filters runoff are all a part of the cumulative burdens on Minnesota’s lakes. Our warming climate adds additional stressors, and invasive species have taken a major hand in some locations. Some folks call for us to learn from our past, and develop a focus on keeping clean lakes clean in the northern tier waters.

What about “my” lake? Is it destined to one-day become one of those lakes that are not worth saving? Will my children sit on this dock in the distant future, and gaze below the surface? Will their souls bathe in the soothing waters? Will we, as individuals and as a society, practice the kind of restraint that it takes to protect such places? Will we take appropriate care in our land use around such places?

And will we keep a watchful eye on the aquatic invasive species, doing whatever we can to slow down their spread? There are a couple of species that I think of as real game-changers, and they

are not that far away. I took a quick look at the Minnesota DNR's current List of Infested Waters. I recommend anyone who has a favorite lake do that. It can really open your eyes.

I discovered that from my lake, it is only 6 miles to the nearest lake (Sand Lake) known to have zebra mussels. Zebra mussels are fingernail-sized mussels with yellow and brown striped shells. Native to Eastern Europe and Western Russia, they most likely came to our country in the ballast water of ships. They were first discovered in Lake Erie in 1988. They were found in the Duluth harbor in 1989. Less than 26 years later, they have made it to my doorstep. With the way people move around between lakes these days, you could say that zebra mussels are knocking on my door.

Unlike our native mussels, zebra mussels can attach themselves to hard surfaces under water. They can attach to and smother our native mussels. They filter the tiny food from the water, reducing food available to desirable larval fish and other animals, and change the water clarity, causing aquatic vegetation to grow. This change in lake dynamics can be disastrous for the native species that otherwise would inhabit the system.

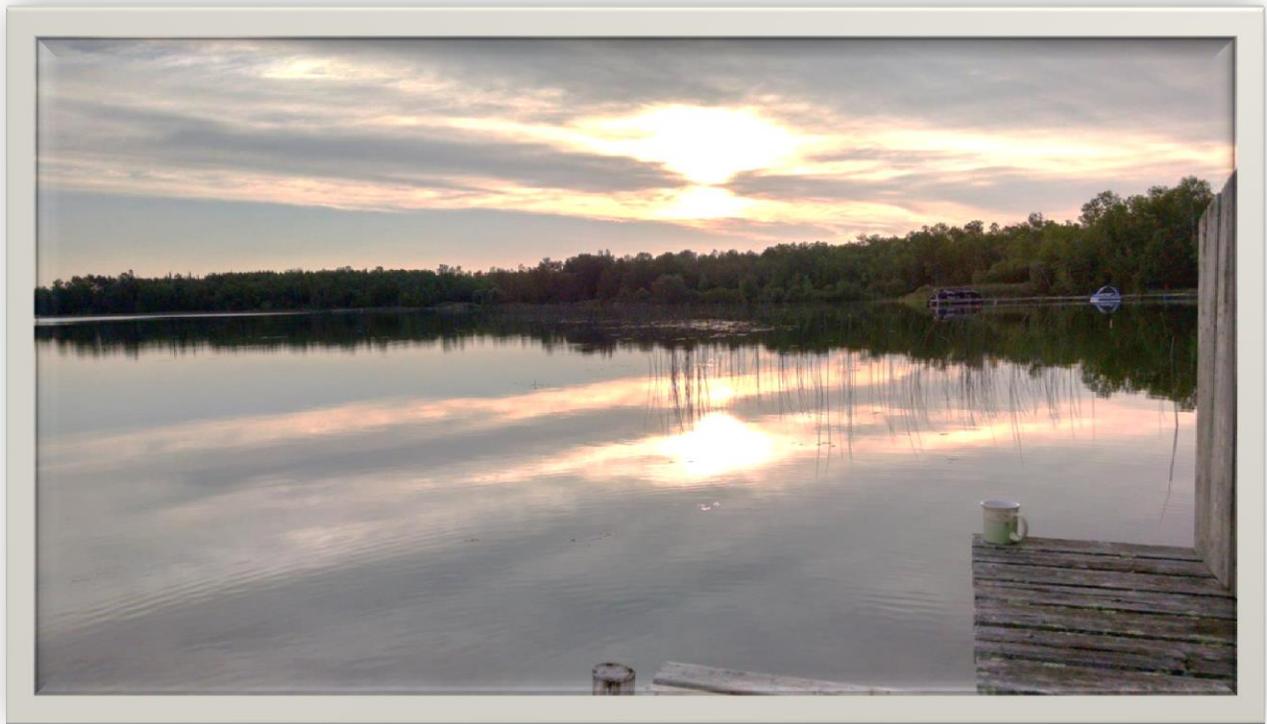
I also found out that Eurasian water milfoil is a scant 27 miles away from my lake. It has been found in Leech Lake on the Chippewa, as well as McKinney and Ice Lakes in Grand Rapids. I must have been sleeping. I thought this monster was hanging out down around the Cities.

Eurasian water milfoil came to North America from Europe, and was first found in Lake Minnetonka in 1987. A submersed invasive aquatic plant, it can form thick, underwater stands of tangled stems and vast mats of vegetation at the water's surface. It alters aquatic systems by displacing native plants, and interferes with boating, fishing, and swimming. It spreads from one body of water to another primarily by introduction of plant fragments. The fragments don't have to be very big.

We are a mobile society, and we love our water. It's nothing to jump in our vehicle, and pull our boat on up to the summer cabin or lakeside campground for a few days of fun at the lake. Folks think nothing of driving considerable distances to go fishing. But have a little care, and think about in what ways you might be the vector of spread for these aquatic hitch-hikers. Before you leave any water access, clean the weeds and debris from your boat. Remove your drain plugs, including the live well. Throw any unused bait into the trash. Don't introduce the water from one lake into another, not even from your minnow bucket. Be sure to dry any docks, boat lifts, and swim rafts at least 21 days before you move it into another water body. That's what it takes for the zebra mussels to die.

Sound like a nuisance? Think about 28 years. That's all the time it took for Eurasian water milfoil to make it from Lake Minnetonka to Leech Lake. How long do you suppose we have before it shows up at our place?

As I look down into the water, the sunfish cruise by, and I realize it's time to leave for work. I have lingered as long as I dare. Blessed are they who can see what they have, and treat it well for those who will follow.



by Kelly Barrett, Wildlife Biologist
Chippewa National Forest

