

A TOUR OF MY LAKE

LOON HOOTS

*Kind of looks like we're all alone.
We are.*

As Aldo Leopold wrote, "...it is a fact, patent to both my dog and myself, that at daybreak I am the sole owner of all the acres I can walk over." So, under Aldo's rules, today, I own a good part of Plum Lake and I am out to inspect my property.

It's past daybreak though - in fact it's noon.



What you see in the photo above is as high as the sun gets at noon in the depth of winter over Plum Lake. I'm on Hooks Point on XC skis. You can just make out Whites Island to the south.

Ivory and I are taking a short rest. With no tracks to follow and a meandering course looking for signs of her resident canine cousins, we are pooped. Ivory was sleeping at home when I was getting

ready, but as soon as she saw the ski boots, the 'I wanna go' puppy came out and leaving her was not negotiable. She knows what all the various boots are for, and she has her favorites.

As we turn south to inspect the south shore, we cross the first snowmobile track near the island. Our ice was very young when the big snow came and put a warm blanket on it. It's now about 7 inches - less in spots. Last year it was more than 2 feet. It's safe for skiers and snowshoes now but the snowmobile clubs have not yet marked the trail over the lake and few sleds have ventured out. I encountered one, carrying an ice fisherman. He showed me his inflatable life preserver under his coat. I'm carrying my ice spikes, but his idea is not bad.

It will be a while before the crowds and the shanties come out and a long time before it is safe for trucks. I think I'll have a bit more time to enjoy my "ownership" of Plum Lake.

AJR



IN MEMORY OF BILL

Bill Carper spent decades on Plum Lake and knew our community inside out. He and Cheryl are part of our lake's history. Bill's passing last fall was crushing to many of us who knew him well, and to most of us because of the many ways he contributed to our lake summers. It begins with golf, which he loved and supported as a board member of the Plum Lake Golf Club and the many activities he organized there like the dinner dances, the Sunday night poker game and the hours he spent over an array of grills, cooking for his fabulous rib dinners. He supported the Plum Ski-ters for 50 years (where Cheryl was a founding member and performer!), driving ski boats, helping with fund raisers and shows and competitions—and seeing his twin grandchildren join the team. Add his love of the Plum Lake Library and his encyclopedic knowledge of “supper clubs of the Northwoods”. Bill was one of our unofficial social chairmen and there is an empty chair at our events without him. He was enthusiastic and funny and kind and inclusive and full of life - he often had that bad-boy glint in his eye reflecting his love of good fun and his friends. Our most sincere condolences to Cheryl and her family.



So many of us can say this, but let me say it once more for all of us.

Bill Carper was a good man and a good friend and I miss him.

PROTECTING LAKE FRONT LAND

Late last summer, the Board of the Plum Lake Association unanimously approved a plan to seek a state grant to acquire a sensitive piece of lake frontage that had come on the market for sale. We had learned of an under-utilized grant for qualified 501©3 organizations to protect critical shoreland and habitat. It is a perfect solution for exactly our situation.

The land is comprised of a bit over 10 acres with 680 feet of lake frontage. It works as a filter for nearly 200 acres of upland that drain through it to Plum and abuts higher forest land with a mature stand of mixed white and red pine and hardwoods with single family residential zoning. The subject property is also zoned single family residential and has a building site of nearly 1 acre that has passed a perc test.

This property is adjacent to a keyhole development that provides all of its residents with lake access and has a lake front parcel that contains a large number of piers.

The development potential for the subject property was clear and preserving this undeveloped wooded wetland was clearly important for the health of our lake.

We now have an accepted offer to purchase from the owner, an appraisal that supports our acquisition cost without having to raise or spend money and have completed a property management plan that will be posted on our website. This plan provides a thorough description of the property with photos.

The property consists primarily of a large wooded sphagnum moss wetland with tamarack and black spruce. It is a lovely area for a hike (with rubber boots) and contains some interesting and endangered wetland plants. It is also the bullfrog capitol of Plum Lake. We have contacted county Land and Water personnel

who have contacts with schools that may be interested in educational opportunities that this land could provide. Our East Bay loon platform is offshore, and a new trumpeter swan nest platform may be located in this area as well.

The grant application is completed and if awarded, will be funded in April and we will close on the purchase at that time. Doug Pinney is leading the grant effort which has involved a steep learning curve for us and for DNR personnel since it has been so seldom used. Doug and John are working together on this property acquisition.

This effort clearly fits within our mission as a lake association and we are excited to have the opportunity. We will keep you advised of our progress.



In 2009, Lake Mendota (Madison) experienced a significant explosion of spiny water flea, a predatory zooplankton that is native to Northern Europe and Asia and it was introduced to the Great Lakes in the ballast water of freighters that came down the St. Lawrence Seaway. Mendota's population of daphnia, the zooplankton that maintains clear water in lakes by eating algae, was reduced by more than half as spinies consumed them. Within 3 years, water clarity had been reduced by 3 feet. Spiny water flea is there to stay, daphnia continue to decline and water quality continues to degrade in Mendota.

THE MYSTERY OF SPINY WATER FLEA

In August of last year, we learned that a UW researcher found a small population of Spiny water flea in Plum Lake. Spiny water flea is native to Northern Europe and Asia and it was introduced to the Great Lakes in the ballast water of freighters that came down the St. Lawrence Seaway. We are the 12th inland lake in Wisconsin where this little monster has been discovered.

In Plum, the population was assessed one more time last fall and the results amounted to one critter. It seems clear we are in the very early stages of infestation. The infestation on Star is significantly larger. This early discovery could give us time to find an effective method to discourage population growth to the point where it significantly affects the food chain and water clarity and that is our goal at this point. Since its discovery on Trout Lake in 14, water clarity has declined. We will follow that example at some point unless we interrupt the growth of the population.

Since then, we have been corresponding with the researcher who is working on spiny, Dr. Ben Martin of UW limnology. His research is focused on top down pressures (predation) on spinies. As he says, his "main theory is if we can understand the native food web of an invaded lake, can we promote the populations of fish consuming spiny water flea in order to decrease their abundances and regain native zooplankton and water clarity".

We knew that cisco are a major predator of spinies and we also knew that our cisco population is struggling to maintain itself as it is in most of the northern lakes. This doesn't seem to be a likely solution to the problem.

Dr. Martin has been working on experiments with various fish species captured in affected lakes to learn about their affinity for spiny and their capacity to eat them. He found that red eared sunfish, smallmouth bass and yellow perch were all predators with perch leading the list. This research will continue north to Vilas County next year, primarily on Trout and also on Plum.

Rewind to 1986, when we first learned that rusty crayfish had been found in Plum. Our historic weedbeds began to disappear over the following decade and with the loss of that habitat, our panfish populations began to decline. Perch are a slow-moving fish and are at the top of the list as prey species for large game fish. Without cover, the population could not sustain itself at its former abundance. Fast forward to today and nothing much has changed for the better for perch.

DNR is promoting a means to increase spawning and cover habitat for fish species with their "fish sticks" projects, for which grants are available. Fish Sticks are mature trees hauled to sites on the lake over the ice and piled in a grid pattern in shallow water and anchored to the shore. Studies have shown significant benefit to panfish and bass populations as a result of the installation of these structures. As a result of the preliminary finding from Dr. Martins study, improved the habitat for panfish and particularly perch could provide a possible control on spinies, if we can increase the populations of predators before the spiny population gets a foothold.

With that in mind, I met last week with Eric Wegleitner, our new fisheries biologist to explore this idea. Our target would be for grant applications next fall and installation of at least 3 structures in the midlake area in the winter of next year, looking at bay locations on state land for two of them and perhaps a fourth in Starlight. Spiny water flea occupies deep water and the population of panfish species in midlake and Starlight Bay is quite low. Focusing on those locations for habitat structures will have the most impact.

In Minnesota, related research on the collapse of the Walleye fisheries in two of the large lakes is ongoing. Kabetogama and Mille Lacs are significantly impacted by spiny water flea and the game fish seasons have been shortened on these lakes due to a drastic decline in the walleye population. Water clarity has also declined. The studies are using Leech Lake and Winnibigoshish as control lakes since neither have been invaded by spinies although core sediment samples found evidence of a failed invasion in Leech Lake in 2001. Leech Lake, by the way, is considered to be one of the best perch fisheries in the upper Midwest which may account for the failed invasion. Using analysis of lake bottom sediment cores, Minnesota researchers made an interesting discovery. In the two invaded lakes, spiny water flea has been found in sediment dating back to the 1930's, although no evidence of spinies being in the lake water was found until 2007 and 2009 respectively. Fish populations began to decline a few years later.

Here is the mystery - the St. Lawrence Seaway wasn't completed until 1958. There is no known vector that could account for the presence of spiny water flea in the 1930's. There is clearly more to learn, but our response cannot wait.

When spinies were first discovered, there wasn't much hope. "Well, there is nothing you can do" isn't a useful response and in the case of our new infestation with spiny water flea, it seems it might not be correct. At the worst, a revived perch population would be a welcome result of our efforts.

PLUM LAKE ASSOCIATION

PO BOX 193

SAYNER, WI 54560

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Email contact: info@plumlakeassociation.org