

FLOW AIS Waterways Writings

January 2022

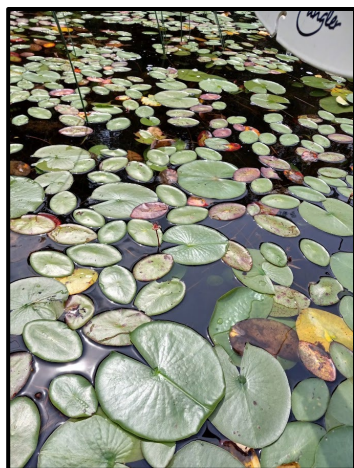
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FLOW AIS HALF YEAR IN REVIEW – COORDINATOR UPDATE

It is safe to so say I learned a few things over the course of my first eight months (May-December) as the FLOW AIS Coordinator. I learned the basics of my job and I learned the roll I am supposed to play as a County AIS Coordinator. With being hired in May I found out that learning the things I had to was not going to be a step-by-step process. It was a learn as you go and grab it when it comes along process. If I didn't grab an opportunity it was gone. Another thing I learned in the first eight months of this job was the people in each county of the FLOW AIS area. From getting to know my co-workers and the county conservationists, to reaching out to the statewide contacts, I've learned how important they are and how much I like who I work with. I was also lucky enough to get to know the recreationalists that use and live on the waterbodies in the area. I listened to them as they told me why they have a passion for the waterbodies they use and why they think invasive species work is important to the area. This helped me to find commonalities in our overall goal to protect our waters and I can apply that to this coming year.

In learning the roll, I am supposed to play and getting to know the people of my job. I was able to get my feet wet and apply what I had learned to give the FLOW AIS program a solid starting base to grow on. I completed a fairly successful field season getting to know firsthand a good portion of the waters in the FLOW area. I also learned what the most prevalent invasives are for each county and the disturbance they cause on the county landscape. Because I work in Oconto County, I was able to become part of a team working to prevent the spread of a new invasive species to the area called European Frogbit. The effort with that species is still ongoing but it has given me the opportunity to collaborate with county and state organizations for one common goal. It has also given me great networking opportunities. The first eight months have really set a good foundation for this program. I look forward to seeing what this coming year has in store.



NEW EQUIPMENT:

Here at FLOW AIS, we're excited to announce we were able to purchase much needed equipment that will help make our projects even more successful. Some of the items we've purchased are kayaks, YSI dissolved oxygen meters (see CLMN for more information), purple loosestrife planting pots and stakes, decontamination supplies, aquatic plant sampling gear and safety equipment.

AQUATIC INVASIVE SPECIES

Spiny Water Flea: From Stop Aquatic Hitchhikers Webpage

The spiny water flea (*Bythotrephes longimanus*) is a member of the crustaceans. The group it belongs to also includes species like crabs, shrimp, crayfish and lobsters. Who knew these nearly microscopic zooplankton were related to things that taste good!? A zooplankton is a small animal that relies on water currents and wind to move long distances. Spiny water fleas are much larger than most zooplankton species in the United States. Because of their small size, the spiny water flea can be very difficult to detect in current infested waterbodies not to mention new waterbodies it may enter.



Where did it come from?

The spiny water flea is native to Northern Europe. It was first discovered in the United States in Lake Huron in 1984. It has since found its way into more areas of the United States and Canada. The spiny water flea was likely introduced through ballast water of ocean-going trade ships. Today, it is found in all of the Great Lakes and has begun to invade smaller inland waterbodies of the Great Lake states and Canada.

Identification

The spiny water flea can be identified by its unique, almost alien like, body shape. (See image above) Its body is made up of a hard outer shell and a long, barbed tail spine. The spine makes up over 70 percent of the animal's total body length (about one centimeter). The spine contains from one up to four pairs of thorn-like barbs. The head consists primarily of a single, large eye filled with black pigment and a pair of mandibles, or jaws. The animals possess four pairs of legs, the first pair being much longer than the others.

Reproduction

A single female spiny water flea can produce up to ten offspring every two weeks during the summer months. That is a ton of new spiny water fleas entering a waterbody in a short amount of time. In the summer, the spiny water flea will reproduce asexually. Meaning reproduction happens as budding, fission, or spore formation, and does not involving the union of gametes. This process creates genetic replicas of mother spiny water fleas.

Possible transfer in the winter

As the temperature begins to drop and the seasons transition from summer to fall, the spiny water flea eggs produced at this time become dormant. These eggs can survive through the wintertime on lake bottoms, in the mud and sediment. This allows the possibility for eggs to be transported long distances. This can be an issue for winter recreationalist like ice anglers. If the equipment the anglers use does not get cleaned off and stays relatively moist. This creates the possibility to transfer spiny water fleas and other invasive species in the mud to a new waterbody.

Known locations

As of now, there is one lake in the FLOW AIS area that is currently known to have spiny water fleas. That lake is Butternut Lake in Forest County. However, there are five lakes in neighboring Vilas County that are known to have spiny water fleas.

CITIZENS LAKE MONITORING NETWORK

New D.O. Meters Available!



The FLOW AIS program has purchased three new YSI Pro Solo ODO dissolved oxygen meters (see photo to left), two of which will be lent out to volunteers involved in the Citizens Lake Monitoring Network within the FLOW AIS area.

The units are simple and easy to use for gathering lake monitoring data. Once the unit is turned on, simply lower the probe end in the water to the white three-foot mark indicated on the cable. Wait for your dissolved oxygen reading to stabilize and record it. Then move the probe lower in the water column to the next three-foot interval (6 foot and so on) and repeat until you have reached the bottom of the lake you are on or there is no reading being registered.

To checkout one of the two dissolved oxygen meters available for citizens lake monitoring use, contact Derek Thorn by email: flowais@lumberjackrcd.org or phone: 715-490-3325. Please leave your contact information, the lake you are volunteering on along with the county it is in, and the dates you were hoping to sample your lake. Once checked out the meters will only be available for three to five days. The reason for this is to make sure each meter is properly calibrated before it gets sent to a new volunteer. Meters must be checked out Monday through Friday. Upon checking the meters out a short demonstration will be giving to insure the until is properly handled and to insure the most accurate reading is taken.

Grant Application Updates

FLOW AIS has applied for a grant with the Temper of the Times Foundation. They are an organization whose main goal is advertising for the environment. The project proposed for the grant is an educational video on European Frogbit and how it can impact Wisconsin's aquatic ecosystem. FLOWAIS should know in February if they received the grant.

FLOW AIS is also currently working on two early detection response grants. One is for working to control a population of hybrid milfoil on Lake Arbutus in Forest County. The other is to help assist ongoing European Frogbit effort plans in Oconto County. This grant will run alongside a GLRI grant that the Wisconsin Department of Natural Resources is applying for.

What's Next For FLOW

From here I start to plan and organize for the upcoming field season and get education and outreach events in place. I will be sending emails to lake orgs to set up Clean Boats Clean Waters trainings. I have meetings with county partners in place to further develop and finish the above-mentioned grants along with new ideas that have been thought of recently. The biggest thing I have to do next is wait for the lakes to unfreeze.

Thank you to everyone who took the time to read this newsletter. Watch for the next newsletter in April.



FLOW AIS Is a Part of Lumberjack RCD

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FLOW AIS WORD SEARCH

N R H K H Z V S J Y B L C E D
Q K U S X P S K G H D O F R W
A O O Z I P J O T Y N R L U W
K C O O S F L J C S S T I S R
E O E S O O M N E F P N W E Z
F N U Q N L W R H O G O W C P
M T H M J Y V X K S C C H C V
C O I Z K A P C G V O O X H A
J L A H T D R M R B L I Y I S
A N T I G O K W V A G B K D Z
L U O K A Y A K N D N M L I E
E N S B O U X V P W Z D E S I
L A J H X R M Z P Z R Z O K W
T R O P H I C S T A T U S N P
R U W C K I U V V N N G Y S L

WordBank:

Antigo, Crandon, Oconto, Conservation, Kayak, Fish, Biocontrol,
Limnology, Trophic status, Secchi disk

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