# The 2012 summer season is filled with opportunities!

### Letter from the Executive Director

I'm writing this note from my desk and occasionally looking out of my window at a Tomahawk Lake that is six weeks ahead of this time last year. The lake has been ice free for several weeks, the Canadian Geese are waking me up each morning (4 a.m. or so) and the wild turkeys are strutting on the woodland paths. While the trees have yet to begin budding, they most certainly will within a few days as it has been sunny and mild for several weeks. It won't be long before boats will be on the lake, the Walleye opener will have come and gone and our summer projects will be well under way. There is a lot of work to be done in the TLA's two main areas of focus: Aquatic Invasive Species (AIS) Control and Education. Let's look at the TLA's 2012 projects and how they affect our watershed.

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### **AQUATIC INVASIVE SPECIES (AIS) CONTROL**

### **Eurasian Water Milfoil (EWM)**

**Treatment:** Because 2011 was a marginal year in controlling Eurasian Water Milfoil (EWM), this year's treatments will be more important than ever. We are beginning the 2012 summer season with more EWM than at any time in recent memory.

We will aggressively treat EWM in 59 polygons, totaling 127 acres. TLA volunteers (Sentinels, HCS team and shoreline owners) have done a very good job of identifying plant bed locations. We are optimistic that with higher water temperatures, EWM further along in development and adjustments into our application methodology, our treatments will be much more effective than last year.

### Again this year, **TLA will be a** partner with the WDNR and the Army Corps of Engineers in

the study of how quickly chemical herbicides dissipate in the water column following application. This study has already presented a great deal of information that has helped us to adjust our chemical application procedures. This year's new data will help us continue to hone in on how best to apply chemical herbicides under varying conditions.

### However, chemical treatments alone will not be sufficient to control EWM in Tomahawk Lake.

We will again use our Hydraulic Conveyor System (HCS) to treat areas that are new and just emerging, are too small to chemically treat, or are not accessible for chemical application equipment. This innovative tool for

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## **2012 Treatment Influenced** by 2011 Findings

Reprinted from March 29 Tomahawk Talk eBlast

While the 2011 chemical treatment results did not achieve our goals, the lessons we learned will substantially contribute to our increased successes in coming years.

We know considerably more about how herbicides act than ever before due to a number of 2011 environmental factors and the Army Corps of Engineers study (Aquatic Herbicide Dissipation Rates Following Application). From this added knowledge, we are making appropriate changes to our Chemical Treatment plans, which we believe will greatly increase the effectiveness of our chemical herbicide applications in the future.

Some of the conclusions drawn from our findinas include:

 We did not attain the herbicide concentration rates needed for success. The EPA maximum rate of application allowed was 200 pounds per acre in water depths of 10 feet or more. This application rate was projected to

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### Fair Share Campaign at 42% of Financial Goal, Falling Short on People Participation

As of April 5, the TLA has raised a total of \$31,866 - 42 percent of our Fair Share Membership goal. A total of 112 families have donated an average of \$284 per household.

We must raise a minimum of \$75,000 by incenting 280 lake property owners (80% of lake property owners) to donate at least \$270 - we have 168 lake property owners to go!

Historically, 4% of lake property owners have funded

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### Letter from Executive Director

(Continued from page 1)

plant removal will again be operated by Ben Brown and Justin Forrest, under the direction of Ned Greedy.

Finally, TLA will be partnering with the **University of Wisconsin - Madison Limnology Department and with** the WDNR in the first year of a four year study of Eurasian Water Milfoil **Weevils** (three years of data collection) as a control agent. Two, small 1 acre areas will be identified as Weevil polygons, where weevils will be introduced in relatively large numbers and studied. Over the three years of the study, data will be collected and analyzed to determine how effectively weevils can control EWM. These areas will be identified on the water, and we ask that you make every effort to stay out of these polygons with boats and or personal watercraft. We want the data to be as accurate as possible, and the best means of achieving this is leaving these sites undisturbed.

**Sentinels:** Our *Sentinels* program is perhaps the most important supporting



tool we have to control EWM in our lakes. Twice a year, Sentinels survey for EWM. Both family & neighbor teams hit the water, GPS and data sheets in hand,

and search out EWM (and other stuff) in their designated sector of the lake. This data directs: our HCS team to areas of infestation for harvesting; our surveyor to locations for mapping and treatment assessment; and assessment of the success of our chemical applications.

The Sentinels are our eyes on the lake, and are of huge importance in ensuring our lakes future health.

Luckily, we have been blessed with committed volunteers for the Sentinel program. It takes 17 teams of two or more people to do each survey and most of

these teams have worked together for several years. The reason for this continuity in volunteers is that doing the survey is fun. Year after year the same people make it a day of fun, where a little work happens.

While the volunteers who make up the Sentinels teams have been remarkably consistent over the past several years, we have had some attrition over the past year or two. We need a couple of two or three person teams to take responsibility for uncovered sectors this summer (and beyond). If you have a boat, a friend or spouse, and the desire to make a difference, then call Roger Cote at (715) 358-6118 to learn about this great opportunity.



Purple Loosestrife Control: In 2011, our Education and Environment Chairman, Dr. Noah Lottig, did a survey of our watershed to identify the areas where we have active Purple Loosestrife infestations. He identified and mapped these locations and in 2012 will be initiating a program to control the spread of and begin removal of Purple Loosestrife from Tomahawk Lake.

Noah will need volunteers to work in this effort.

I know that the tasks involved in his program will be both fun for the volunteer and effective for our watershed. If you would like to help, I ask you to contact Noah at nrlottig@wisc.gov to make that commitment of a small amount of time and effort to free our lake of this invasive threat.

### **Aquatic Invasive Species (AIS) Education**

### **Clean Boats Clean Waters Education:**

As I noted in our most recent spring e-blast, the 2011 Clean Boats Clean Waters (CBCW) educational effort at our two most used boat ramps (City of Lake Tomahawk & Thoroughfare ramps) were again highly successful. While the numbers of boats and people entering and

leaving our lakes through these portals were down slightly from the record year of 2010, our ramp attendants still contacted more than 9,200 visitors to our lake system, presenting the message of good stewardship and personal responsibility in protecting our water resources. In addition, 3,044 boats were inspected for EWM and other Aquatic Invasive Species (includes boats, motors and trailers). Last year was not a great year for visiting boaters because May and June were among the coldest years on record for the Northwoods. This year, with the near record warmth that has spread across our area, I anticipate that our CBCW contact results will be higher than ever before.

As successful as our CBCW program has been, we continue to be touching only a small fraction of the people who come to Tomahawk for their summer recreation. Our success has been directly tied to the use of paid ramp attendants on summer weekends. On week days we are totally uncovered at the ramps. At one time, we had a relatively strong volunteer group who made a huge difference in keeping AIS out of our lake, but despite the call for volunteers in every e-blast and direct mail letter that we send out, our volunteer base has simply evaporated. Can it really be that while our membership says that it remains concerned about our lakes future health, they feel no responsibility to actively work toward that end?

**Clean Boats Clean Waters needs** volunteers! It needs a person to keep track of who is volunteering at what ramps and when (phone work of 15-20 minutes per week), and it needs volunteer ramp attendants once per month (4 hours). At these levels, we still will be uncovered the majority of the time, but we will at least be making an effort at key times of high boat traffic.

If you have property on Tomahawk Lake, and if you have a mouth, you are uniquely qualified to volunteer for boat ramp duty once per month! Call Ned Greedy to sign up (715) 358-7896.

### **TLA Annual Picnic at Kemp**

**Station:** In 2012, TLA will be having its annual summer picnic event at Kemp Station on **Saturday**, **July 14**. This year the picnic chairman is TLA Vice President, Jim Andersen. Jim is in the process of completing the picnic plans, and I know that he is in need of some picnic volunteers to help with things like parking, seating and food. If you would like to *help out for a few hours at the picnic*, I know that he would love to hear from you. Contact Jim at jandersen@madisonradiologists.com

### Please do your part to keep our lake healthy

There are two ways TLA members support efforts to protect our watershed. One way is by consistently paying your "Fair Share" *portion* each year. This is vital to the continued operation of TLA initiatives aimed at keeping Tomahawk Lake the "Jewel of the North" that it has been. To join, go to: www.

### tomahawklake.org

The second way of supporting TLA's efforts is to volunteer. If you're doing one, but not the other, you are missing out on a rewarding opportunity to make a positive effect on the health of our lake and watershed. It is up to you to call and volunteer for those times when you are available. Please make that call! We need your help!

I don't recall a year when I've been so anxious for summer to get here. Perhaps I'm getting old, but as far as I'm concerned, winter doesn't hold a candle to spring, summer and fall in the Northwoods. With the early warm weather this year, it's safe to say that our time at the lake will be extended in the summer of 2012. That's a good thing, as we have a lot of fun to be had, and a great many memories to pile up for next winter's snowy nights. I'll see you soon out on the lake!



Ned Greedy Executive Director Tomahawk Lake Association, Inc..

## Fair Share Campaign

(Continued from page 1)

the majority of TLA activities. To create a more sustainable funding model, the Fair Share Membership program was developed in 2011. Last year, the *Fair Share* campaign achieved its financial target of \$75,000 yet fell short of the participation goal.

Please send in your *Fair Share* and talk to your neighbors and friends about doing the same. Listed below are those who have already contributed - and we thank you all very much!

Andersen, Randy & Kathy Baines, Jim & Cathy Bartsch, Ronald & Gay Meier Bateman, Bill & Marsha Beech, Tom & Carol Benjamin, Ralph & Diane Bergman, Donald Boles, Sarah Bortner, Dave Bortner, Rebecca & C. Oberle Brock, Amy & Clay Brock, David & Noelle Broomell, Dare & Mary Broomell, Ken & Nancy Buchheit, Charles & Susan Buerger, William Combs III, Earle & Virginia Conland, Henry Connor, Eugene Converse, Arlan & Marilyn Cooledge, Richard & Barbara Coriell, Gene & Chris Corneille, Marlis J Cote, Roger & Fran Davidson, Michael & Martha Dierberg, Jeff & Brigit Donner, Keith & Gail Drummond, Herbert Erickson, Jon & Dorothy Faulks, Robert & Christine Ferguson, Jim & Sue Fershee, Whitney & Aaron Filippo, Sam & Susan Fites. Donald Fitzgerald, John & Kate Foster, Race & Lynne

Fox Den Family Ltd Partnership

Frost, Jack & Delores Gabby, William Gauchel, Peter & Brenda Gerstner, Jeff & Dian Goltermann Jr., Louis Haupt, Thomas & Nancy Ann Hill, Howard Hillinger, Gwen Hoehne, Robert & Faye Hoellerich, Daniel & Lynn Hoerr, Edward & Judy Hoppe, Lee & Sunday Hunt, Jon & Kris Igoe Jr., Michael Irujo & Barck Janssen, Donald & Greta Jelenchick, Bill & Doreen Johns, Timothy & Diane Jones, Donald & Susan Klecker, Francis & Judith Krueger, Dave & Lois Krueger, Ken & Mary Ladowski, Casey & Ann Lasier, David & Clare Lasier, Thomas & Phyllis Lidbury, Chuck & Deb Mahony, Bill & Mary Mares, Bonnie Martin, Charles & Cynthia Martin, Don McEachron, Scott & Debbie McNamar, Pat & Marlys Melius, Dr. Fred & Connie Michels, Jeanne Miller, Bob & Marjorie Mox, Evelyn Nichol, Pat & Jane Held Nicholson, Jim & Bow

Nisk, Ronald & Alice Nygren, Keith & Marge Orr Jr., San & Joanne Palmer, Pete & Sarah Petersen, David & Carlene Rengel, Lenore Duxbury & Thomas Rheinschmidt, Dave & Judie Rikkers, Fred & Linda Riveron, Dr. Fritz & Heide Roberson, Roger & Ramona Romanski, James & Virginia Schelvan, Todd & Debra Schindler, Gary & Margie Schuette, Clark & Kathy Schuette, Jay & Gretchen Schuette, Rudie Schwantes, William Scuglik, Jim & Betsy Shain, Paul & Suzy Smith, Laird & Nancy Smithing, William & Patricia Sonneland III, Arthur & Kay Sosnowski, Brian & Darlene Sperling, Bruce & Elizabeth Stenvig, Claude & Dona Thalacker, Rick & Cyndi Thompson, Jim & DeeDee Town of Minocqua Traut, Karen Vande Walle, Mark Van Ells, Chris & Doreen Vintika, Raymond & Jori Von Holdt, Robert & Stephanie Winchester, Brad Witte, Mark Zimmer, David & Patti Zingale, Douglas & Sue

# **Sign Up** to **Protect**Tomahawk Lake **This Summer**

This year, the TLA will continue aggressively fighting EWM, educating our lake users, communicating our programs and goals to the Lakeland community and enlisting the efforts our membership in keeping Tomahawk Lake the "Jewel of the North".

# Please share your time to help protect our lake!

### **EDUCATIONAL OUTREACH**

- The **TLA Summer Picnic** will take place at Kemp Station on Saturday, July 14. We need a variety of volunteers to staff this event. Duties range from setting up and directing parking to leading Lake Fair educational activities. Time Commitment: 4 hours on July 14. Contact: Jim Andersen at jandersen@madisonradiologists.com
- Clean Boats Clean Waters educational outreach program needs volunteers! Time Commitment: We need a person to keep track of volunteer schedules (phone work of 15 20 minutes per week), and we need volunteer ramp attendants for a minimum time commitment of once per month

(4 hours) between Monday and Thursday. Contact: Ned Greedy at (715) 358-7896 or edgreedy@gmail.com

- Each year, the TLA has a presence in the **July 4th Parades** in Minocqua and Lake Tomahawk.
  Parade marchers hand out information on the
  TLA and EWM efforts along with treats for the
  kids. Parade marchers are needed to help pass
  out information on the TLA. Time Commitment: **Approximately 3-4 hours on July 4th**.
  Contact: Margo Oppenheim regarding the
  Minocqua parade at (715) 356-3722 or
  mmoppy@deerrunstone.com; Rebecca Bortner
  regarding the Lake Tomahawk parade at
  (414) 397-9064 or rdb1974@qmail.com.
- Again this year, the TLA needs volunteers to host small, intimate **Fair Share Membership Neighborhood Meetings** to raise awareness for the Fair Share Membership campaign. The TLA will provide information to share and a TLA board representative will attend to help answer questions. **Time Commitment: 1-2 hours.** Contact: Kris Hunt at (312) 246-4244 or Krishunt52@gmail.com

### **ENVIRONMENTAL MONITORING**

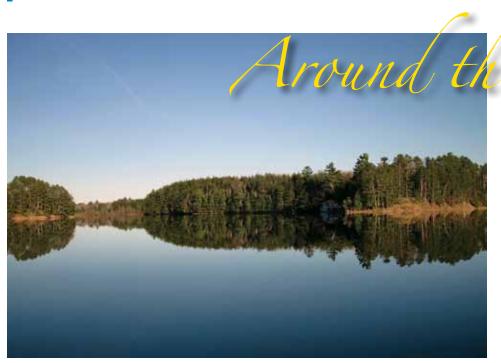
 We need more volunteers to "man the boats" for our lake *Sentinels* Eurasian Water Milfoil Monitoring Group. Teams of volunteers head out to look for new crops of EWM, survey our treatment success, and help structure our treatment program for the following year.

Time Commitment: 4-hour period, twice per summer. Contact: Roger Cote at (715) 358-6118 or mcote@gmail.com

- New initiatives to control Purple Loosestrife are being taken this summer. Purple Loosestrife is the pretty purple wild flowers you see in a few areas of our lake shore. Left unchecked, the plant will take over the native shoreline species. Noah Lottig is looking for a few good people to help. Contact Noah at (715) 356-9494 or nrlottig@wisc.edu
- The Citizens Lake Monitoring Program will continue to monitor the physical & chemical make-up of our lake. Many lake associations around the state have experienced changes to the chemical make-up of their watersheds due to both natural and man-made causes. The Citizens Lake Monitoring Program will watch for these changes in our lake, so that we are aware before damage results. Volunteers aren't needed at this time, however if you would like to learn more, contact Noah Lottig at (715) 356-9494, or nrlottig@wisc.edu.

With the committed help of our TLA membership all of these programs can and will continue to make a huge difference in the health and wellness of our lake.

Please find time to get involved!



### Photo by David Maki

What a night it was on April 12th... not a ripple on the whole lake! This picture was taken looking east into Kemps Bay.

If you have a photo you'd like to submit...please do! It's wonderful to see different images from around the lake. Thanks, Barb Kirschner: bekdek@wi.rr.com



# **Hydraulic Conveyor Begins** Fifth Year of EWM Harvesting

This summer will mark the fifth year of EWM harvesting operations for the TLA's innovative Hydraulic Conveyor System (HCS).

Based on a system utilized on Seven Island Lake and re-engineered by TLA volunteers, the Hydraulic Conveyor System is a suction-based, diver-directed system for lifting EWM manually from the lakebed to a transport watercraft on the surface.

EWM primarily reproduces by plant fragmentation. Effective removal requires harvesting the entire plant – which grows in towers reaching up to 18 feet and 40 inches in width along with its root ball. Because of its reproduction characteristics, manual removal also requires getting it to the water's surface for disposal without any part of the plant breaking loose.

To accomplish this, members of the TLA designed and built a submersible suction apparatus comprised of a water pump, siphon head and hose, and a collection bin installed on a pontoon boat. The Hydraulic Conveyor System enables chemical-free plant removal. Because

plants are selected and removed by a diver and transported by the hydraulic conveyor, the system allows selective targeting of EWM while leaving native aquatic plants and the bottom of the lake largely undisturbed.

Since the inception of this unique harvesting concept the HCS has been refined and rebuilt on an on-going basis. What began as a test in Blueberry Bay by a few TLA members, a water pump and a 55 gallon pickle drum, today is a highly efficient, closed system which removes up to 1,000 pounds of EWM plant material each day. It represents the first line of defense against new stands of EWM in Tomahawk Lake by removing them before they are big enough to require chemical treatment.

To operate the HCS, the TLA has been fortunate to employ experienced divers who not only have had great diving experience, but who also have demonstrated their commitment to our water resources by working toward and receiving degrees in water-related science. Our first dive team, April Londo and Nick Strupp were students of Aquatic Biology and Chemistry. April stayed with us for three years, while Wes

Rikkers and Jonathan Pearce worked with us during years two and three. Last year, Justin Forrest and Ben Brown operated the HCS. These divers have accomplished impressive results for the TLA and our AIS control program and they have moved on to the next phase of their education and career development.

### For 2012, Justin Forrest will return on HCS Dive Team.

We are close to securing a replacement for Ben Brown who will not be returning this season.

Justin Forrest, from Lake Tomahawk, is a senior at Central Lakes College in Brainerd, Minnesota. His major is Natural Resource Management, where he has maintained a 3.93

GPA. He has considerable coarse work in waters science, including experience in water chemistry analysis, and fisheries data analysis. In addition, Justin has considerable experience in cold water diving, including ice diving, and certification in PADI rescue diving. He is completing work on his First Responder certification as well. Clearly, this boy can swim!

We are very fortunate indeed to have been able to find and employ very high quality individuals in our HCS program. In the upcoming 2012 harvesting season, if you see our harvester while you are out on the lake, please "give 'em room" and remember – Diver Down – Keep Back.

### **Eurasion Water Milfoil**



reproduces by fragmentation.

**Avoid EWM** weed beds. Keep your boat clean and prevent the spread

of EWM.

## 2012 Treatment Influenced by 2011 Findings

(Continued from page 1)

provide a concentration of 2.00 ppm in the water column and provide more than enough chemical herbicide to kill EWM plants.

In reality, we saw that the actual concentrations of herbicides immediately following application were approximately half of the anticipated concentration. The Army Corp Study showed that the actual concentration was approximately 1.00 ppm, and fell off very quickly as time elapsed following treatment. Obviously, the concentration rates needed for success were not attained.

### EWM plants need to be mature enough to receive and take in the herbicide.

Sufficient EWM plant growth is required prior to application to supply a "receptive" treatment target. Consequently, warm water temperatures, adequate sunlight and sufficient growing time are required to allow the plants to be mature. Without any one of the three, the plant's ability to absorb the herbicide will substantially reduce.

Therefore, application dates need to be flexible based on the weather. In past years, state treatment requirements were not defined by actual weather patterns in any given year and have limited us in allowing adequate plant growth.

In January the WDNR, various Universities, and applicators met in Rhinelander to determine how to proceed. Several issues were addressed, but perhaps the single most important change has to do with prioritizing "treatment effectiveness" as a defining protocol. In the past, rigid protocols

have defined permitting by the WDNR. The one-size-fits-all protocols have not been flexible, resulting in unique problem areas on specific lakes.

### This meeting shows that things are changing for the better.

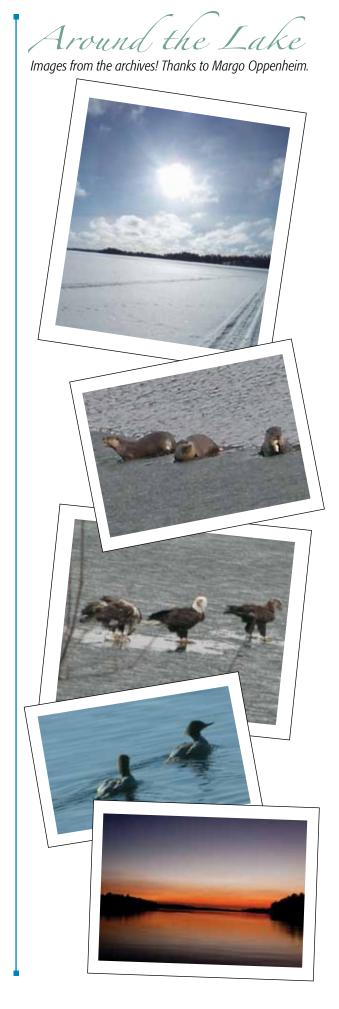
Specifically, there will be more flexibility in what permits will allow, including:

- Increasing herbicide concentration rates. The 200 pound per acre maximum rate has been increased to 4.00 ppm acid equivalent target water concentration. The new rate will be based upon the projected actual concentration of herbicide in the water column immediately after application. In other words, instead of saying "no more than 200 lbs per acre", the amount of herbicide applied will be determined by how much herbicide it will take to get to an effective concentration level in the water at plant depth, to kill the plants.
- Application dates will be defined by plant readiness, rather than arbitrary dates. "Latest application dates" will no longer be determined as a set date, but rather will be defined by when has plant development progressed to a point that the plants are ready to receive the herbicide.

While the WDNR will need to confirm this in writing, we can have confidence these changes are being made. This is certainly an indicator that there is movement within the WDNR to be more "user friendly" and results oriented.

In addition, our inclusion in scientific studies like the Army Corps of Engineers Study on Herbicide Dissipation has played an important role in gaining the knowledge necessary to influence and drive this type of partnership with the State of Wisconsin.

In 2012, we will again be partnering with the Army Corps of Engineers, the WDNR, and the University of Wisconsin in two studies.





by Margo Oppenheim

- February 29th brought 20 inches of fresh snow to the area. This was the largest one day snowfall since 1937.
- March 22nd brought out the first boat as the ice literally melted away on Tomahawk Lake. There shouldn't be much ice damage this year as we really didn't have a nasty wind to blow the ice around. It just melted from the warm temps and early rain. The earliest I can remember is April 3rd a couple years ago and we thought that was early! Rumor has it that in 1920 the lakes were free of ice in late March as well. NO! I cannot remember back that far!
- I have seen robins, blackbirds, mourning doves, mallards, wood ducks, mergansers, muskrats, chipmunks and geese so far and it is only March 23rd! On April 1, I saw three loons while perusing the lake on our first pontoon ride of the year.
- The only new business in town is the Brown Barn Bath Co., a natural soap shop on Main Street in the Island Cafe block.
- Construction on Hwy. 51N from downtown to Hwy J has been postponed until spring of 2013. Property owners, the Town of Minocqua and the DOT are still working out the details.
- Save More Marketplace is getting a face lift. Look for an upgraded façade with new stone accents and new signage.



### **Board Meetings**

May 12, 2012 8:30 am June 9, 2012 8:30 am July 7, 2012 8:30 am August 4, 2012 8:30 am

**Annual Meeting** - Election of Officers & Board of Directors September 8, 2012 8:30 am

All meetings will be held at Lakeside Grill.

Board meetings are open to all TLA Members. Email Margo at mmoppy@deerrunstone.com with questions.

### **Annual Picnic & Educational Fair**

July 14, 2012 at Kemp Station





W I S C O N S I N

Hazelhurst \* Lake Tomahawk \* Minocqua \* Woodruff

Tomahawk Lake Association P.O. Box 535, Minocqua, WI 54548

# 2012 EWM TREATMENT MAP

This year, we will aggressively treat EWM in 59 polygons, totaling 127 acres. TLA volunteers (*Sentinels, HCS team and shoreline owners*) have done a very good job of identifying plant bed locations.

Lake shore property owners who live near treatment polygons should have received a letter outlining treatment dates.

If you have questions regarding treatments, contact Ned Greedy at edgreedy@gmail.com or (715) 358-7896.

