

# BOOT LAKE

## Newsletter



### Inside This Issue

Officers	1
Aquatic Invasive Species	1
Minnesota Waters website	1
Citizen Lake Monitoring Report	2
August Annual Meeting	2
Adopt-a-Road Program	2
August 2006 DNR Fish Survey	3
June Board Meeting Minutes	3
Coffee Party Schedule	4
Dues Notice	4

#### OFFICERS

- Fred Luckerth, Chairperson
- George Thelen, Vice-Chair
- Dan Simms, Secretary
- Pam Harvala, Treasurer
- Dave Kloss, Director
- Larry Kavolak, Director

Check out **Minnesota Waters** new website at : [minnesotawaters.org](http://minnesotawaters.org)  
Click on *lakes and rivers groups* and access many websites for local Lake Associations. See what activities and projects other local groups are involved in around this area and around the state.

#### Aquatic Invasive Species

Minnesota lakes are under siege, threatened by a growing number of aquatic invasive species (AIS) being transplanted by humans, initially from regions where these species occur naturally to regions where they do not, and then from one water body to another on watercraft and trailers. These invaders go by a number of strange sounding names, e.g., curly leaf pondweed, Eurasian water milfoil, spiny water flea or zebra mussel, and once introduced into a "foreign" environment, they can dramatically alter the longstanding ecological balance by damaging, diminishing or destroying native fish and vegetation, severely compromising recreational suitability, and serious infestations can adversely impact lakeshore property values. The guiding maxim when dealing with AIS should be "An ounce of prevention is worth a pound of cure" as there is to this point no documented example of the eradication of an AIS once it has established itself in a new home. And the "pound of cure"—which speaks to control, not eradication—can be costly; the Portage Lake Association has spent over \$50,000 over the past 4 years to control its curly leaf pondweed infestation.

While Minnesota lakes in the southern half of the state are having significant AIS problems, the north central portion of the state has until recently been much less impacted. However, the presence of Eurasian water milfoil in Leech Lake, curly leaf pondweed in Portage, Upper Twin, and Blueberry lakes, and the more recent discovery of curly leaf pondweed in the 11<sup>th</sup> Crow Wing Lake (which puts the entire Crow Wing chain at risk) carry ominous portents, particularly given the rapidly accelerating growth in population and development in north central Minnesota. The geographic distribution of AIS correlates strongly with population and proximity to major highway routes. The AIS threat has prompted the Hubbard County Coalition of Lake Associations to constitute a task force which, planning intently throughout the past winter, generated a series of action steps now being implemented to reduce the risk of the further spread of AIS to Hubbard County lakes. Working with the DNR and Wildlife Forever, an extensive signage program has been implemented, with large signs [STOP AQUATIC HITCHHIKERS] having been placed on four billboards along major highways into the county, while the county highway department has helped with the placement of 11 smaller signs on county and township roads. It is anticipated that many county lake associations will be working with their townships to place additional township road signs. A second effort involved scheduling workshops in June, conducted by Minnesota DNR Ecological Services personnel, at which participants learned to recognize the various AIS and how to effectively inspect watercraft and trailers for their presence. The AIS task force also held a meeting with Hubbard County resort owners and continues to work with this group to provide them and their customers with tools to create AIS awareness and to guide watercraft and trailer inspections. The response has been highly positive, with many resort owners ordering "Stop Aquatic Hitchhiker" signs for use on resort property. Finally, the task force has an ongoing effort to produce materials that can be used to educate the general public on the risks of AIS. A Power Point presentation is being prepared for use wherever speakers are sought for discussions of the AIS issue, while various handouts will be distributed to resorts, bait shops, motels, the Chamber of Commerce, etc., any and all places that lake users regularly frequent. All such efforts require time, money, and "elbow grease", i.e., volunteers. The AIS task force is a costly, unbudgeted effort, but the issue was deemed of sufficient urgency to justify a "leap of faith" that the program could be undertaken, financial commitments made, and the money subsequently raised. Gratifyingly, a DNR grant plus donations from lake associations and local businesses will cover most, but not yet all, of the first year expense; there will be additional expense as the program unfolds throughout the balance of this season and in future years. Additional donations are most welcome and can be directed to the COLA treasurer, John Weber, at Hubbard County COLA, P.O. Box 746, Park Rapids, MN 56470. The COLA Call also goes out to those willing to commit some time to this worthwhile effort. More people would make additional initiatives possible while enabling greater progress on those currently underway. The ultimate objective ——Preservation of our incredible quality of life in north central Minnesota

\*\*\*\* This column appeared in the June 9, 2007 edition of the Park Rapids Enterprise  
For more information on AIS, check out the MN DNR website at:  
[http://www.dnr.state.mn.us/ecological\\_services/invasives/index.html](http://www.dnr.state.mn.us/ecological_services/invasives/index.html)

### **Citizen Lake-Monitoring Program-Plus (CLMP+) Monitoring on Boot Lake**

The Minnesota Pollution Control Agency (MPCA) issued a report for the 2006 CLMP conducted on Boot Lake. Below is a summary of the report. The complete report can be viewed on the Boot Lake Association website:

<http://www.minnesotawaters.org/templates/groups/3953/files/200703%20MPCA%20Citizen%20Lake-Monitoring%20Program%20-%20Boot%20Lake.pdf>

#### **Program History and Background Information**

Minnesota's CLMP is the largest and oldest volunteer lake monitoring program in the country. Volunteers in the CLMP currently use a Secchi disk to measure the clarity on hundreds of Minnesota's lakes. The expanded program, including the collection of water chemistry samples for analysis along with Secchi transparency collection, was conducted in Becker, Itasca, and Polk Counties in 2006. In Becker County, Boot Lake was selected for monitoring during the 2006 season. As part of the CLMP+, volunteers collect water chemistry samples and temperature profiles twice per month along with taking weekly Secchi transparency readings. For Boot Lake, Michelle Prosser, Hubbard County Soil and Water Conservation District, coordinated the sample drop-off/pick up schedule for the samples. Special thanks to volunteer Roger Stecker who helped make this project a success.

#### **Summary and Recommendations**

During the summer of 2006, Boot Lake in Becker Country was sampled by Minnesota Pollution Control Agency (MPCA) staff and volunteer Roger Stecker as a part of the CLMP+ monitoring program. Boot Lake was selected because as it was prominent in the county, showed a strong positive Secchi transparency trend, and lacked recent water chemistry data beyond the CLMP Secchi data. The combination of water chemistry and Secchi data provides a good baseline for these lakes, and allows verification of Secchi as an accurate predictor of the trophic status (level of growth or productivity in phosphorus content, algae abundance and depth of light penetration).

Following are general observations and recommendations based on the monitoring and data analysis:

- **Secchi transparency monitoring:** Boot lake has participated in CLMP since 1978, and the average Secchi readings are below (better than) the range of values for reference lakes in the Northern Lakes and Forest (NLF) ecoregion. Monitoring Secchi transparency provides a good basis for estimating trophic status and detecting trends. Routine participation is essential to allow for trend analysis. Continued CLMP monitoring of Boot Lake will contribute to the database, which already exists and allow for future trend assessments.

- **Water quality and trophic status:** Based on data collected in 2006, Boot Lake total phosphorus concentrations were better than the typical range for minimally-impacted lakes in the NLF ecoregion.

- **Water quality trends:** Boot Lake had a long, continuous record of Secchi data, with 28 years (1978-2006). Currently, Boot Lake is exhibiting a positive (improving) trend in transparency. Continued monitoring of Boot Lake will enhance our ability to further assess trends in this lake.

Boot Lake is of excellent water quality and every effort to protect it from degradation should be taken. Further development or land use change in the watershed should occur in a manner that minimizes water quality impacts on the lake. In the shoreland areas, setback provisions should be strictly followed. DNR and Becker County shoreland regulations will be important in this regard. The lake association should seek representation on boards or commissions that address land management activities so that their impact can be minimized. The booklet, Protecting Minnesota's Waters: The Land-Use Connection, may be a useful educational tool in this area.

On-site septic systems are a potential source of nutrients to lakes that are non-sewered. While their influence may not be expressed in terms of dramatic increases in algae in the lake, they may be expressed by increased near-shore weed growth or excessive attached algae on docks and plants. A house-to-house septic system survey may help the lake residents and Becker County determine if homeowners are familiar with the age and maintenance (pumping) of their systems and if further education is needed on proper maintenance of their systems. This may also help them encourage all homeowners with non-code systems to bring their systems up to code. The lake association may want to facilitate a lake-wide schedule for pumping systems.

An examination of land use practices in the watershed and identification of possible nutrient sources such as lawn fertilizer, the effects of ditching and draining of wetlands, and development practices etc., may aid the lake association in determining areas where best management practices may be needed. For example, recent studies indicated that a majority of lawns in the Twin Cities metro area do not need additional phosphorus – this may be true for lawns in Becker County as well. In April 2005, a new law came into effect restricting the use of phosphorus fertilizers in Minnesota. Lake associations, together with Becker County, should encourage the use of P-free fertilizers and educate property owners on the phosphorus ban in the watershed. There may be other opportunities to implement/promote Best Management Practices (BMP's) that may reduce nutrient loading from other sources in the watershed as well.

## **Reminder**

**August Annual Meeting** – Mark your calendars for the Annual Association Meeting and Potluck Picnic on Sunday, August 12 at Noon at Jim and Judy Theisen's, 35258 East Boot Lake Rd. The meeting will begin promptly at noon followed by the Potluck.

**Becker County Adopt-a-Road Program** – Our Spring pickup was scheduled for May 5. About 20 willing participants showed up and we gathered for an afternoon potluck. But rainy windy weather forced us to postpone the pickup portion. We then divided up the 3-mile stretch of Boot Lake Drive and thanks to many volunteers the road was cleaned up over the next week as each volunteer's schedule would allow. Mark your calendar as we will gather for the next pickup on Saturday, October 6. Watch the website for specific details.

**August 2006 DNR Fish Survey**

At our Association Potluck Picnic in June, Doug Kingsley from the DNR Fisheries office in Park Rapids, gave a presentation on the 2006 Boot Lake Fish Survey. Briefly, his summary was that the walleye population is healthy while northern pike, bass and panfish could be improved. Here are some details.

- Walleye abundance was up, with a total catch rate of 81 walleyes for nine gill nets set, or 9 per set. This is the highest recorded for all surveys on Boot Lake. The current DNR management goal is for 5 walleyes per gillnet set. Walleye abundance in recent surveys has generally fluctuated around this management goal. Sampled walleye had an average length and weight of 16.3 inches and 1.7 pounds with fish measured up to 27 inches. Boot Lake is currently involved in a research study to evaluate various sizes and rates of walleye stocking. Future walleye stocking in Boot Lake will be based on recommendations from this research project. Yellow perch, an important forage species for walleye, were sampled at their highest abundance (11 perch per gill net set), within the range "typical" for a lake similar to Boot Lake (i.e. deep and clear). Yellow perch abundance in past surveys has been at low levels, generally below or the low end of the range "typical" for a lake of this type. However, currently yellow perch are generally not an acceptable size for angling.

- Northern pike abundance (6.7 pike per gill net set) was within the range "typical" for this type lake, and similar to past surveys. Small, "hammer handle" pike with an average length and weight of 18.0 inches and 1.3 pounds dominated the northern pike sample. The northern pike population in Boot Lake is limited by high reproduction and recruitment of young pike and very slow growth rates. Past surveys have sampled very few larger pike, and reports from anglers have been limited.

- Boot Lake is not really known as a bass-panfish lake because of its limited shallow water habitat and productivity. However, Boot Lake does support moderate numbers of bluegill and largemouth bass, and low numbers of black crappie. Sampled bluegills were small in size, with an average length of 4.5 inches and low numbers of fish sampled over 7.0 inches. Bluegill growth rates are very slow in Boot Lake. Black crappie were not sampled in 2006, but have been sampled in past surveys in low to moderate numbers. Past surveys have shown the black crappie to be an acceptable size for angling. Largemouth bass have been sampled in low to moderate numbers in surveys on Boot.

Other species sampled included abundant numbers of yellow bullhead and moderate numbers of rock bass. White sucker and hybrid sunfish were sampled in low numbers.

The complete draft report can be viewed on the Boot Lake Association website:

<http://www.minnesotawaters.org/templates/groups/3953/files/20060814-Draft-Boot%20Lake%20Fish%20Survey%20Report.pdf>

The final report will be posted to the DNR website by September:

<http://www.dnr.state.mn.us/index.html>

Then click on the Lake Finder button to access the info for Boot Lake

**Boot Lake Association  
Meeting of the Board of Directors  
Saturday, June 10, 2007  
Home of Jim and Judy Theisen**

**Attendees:**

Fred Luckerth – Chair  
George Thelen – Vice Chair  
Pam Harvala – Treasurer  
Dan Simms – Secretary  
Larry Kavolak – Director

**~Minutes~**

- 1) The board has decided on no door prizes this year at the June pot luck
- 2) Dan Simms' term as secretary expires in 2007 – Dan Simms agrees to serve another term
- 3) George Thelen's term expires this year. Would like to step down and would like to see some young blood step up.
- 4) Dave Kloss' term is expiring – Dave would like to step down unless no one else steps up.
- 5) There will be two vacancies to fill. Vice Chair and board member. Volunteers to serve on the board are needed.
- 6) Discussion on having door prizes - vote for having two \$25 door prizes for the annual meeting. A vote was taken and passed unanimously
- 7) Some discussion about the occurrences of aquatic invasive species in lakes as nearby as Portage Lake. A reminder to all property owners and lake users to make sure that boats are inspected, all vegetation is removed and bilges drained.
- 8) A reminder from Pam Harvala to be very careful about deer ticks.
- 9) Discussion of Report from MN Pollution Control Agency (May 4, 2007). Boot lake water quality is excellent and every effort should be taken to preserve it. The report will be posted on the web site and summarized in the newsletter and annual meeting
- 10) Dan will be updating the bylaws on the website as they are slightly out of date.
- 11) Presentation to the association by Doug Kingsley – Area Fisheries supervisor, MN DNR
  - Doug reported on the Boot Lake Fisheries Management plan
  - Explained the Proportion stock density
  - Boot lake is a research lake for stocking strategy. – chosen because of its characteristics of deep clear water etc.
  - Boot lake is lake class 23
  - Smaller Northern Pike should be harvested; larger ones should be released for better quality fish.
  - Not managing Boot Lake for Large Mouth Bass
  - No electro fishing is done. Gillnet/trap net testing is done...not as effective. Bass can avoid gillnets.
  - Crappies: Historically low counts. Crappies sampled best with trap nets.
  - Blue gills – best sampled with trap nets. Numbers are better than would be expected due to rapid drop off. Blue gills like shallow. Smaller bluegills should be harvested. There are too many for the food supply. Thinning the stock is desirable.

~Meeting Adjourned 12:00 PM ~

Submitted Wednesday, July 11, 2007

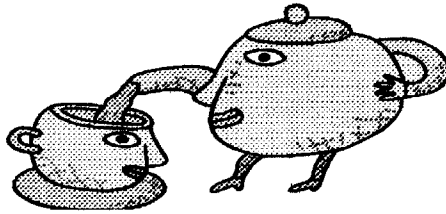
Dan Simms

Secretary, Boot Lake Association

**Coffee Party Schedule**

Please feel free to attend the monthly coffee at the place and dates indicated below at 10am. Call for directions or just come – all are welcome.

Aug 14	Lunch at Itasca Headwaters restaurant	11:30am	Linda Hunt	732-7576
Sep 11	Iris Shepard			732-3584
Oct 9	Barb Stecker			732-0941
Nov 13	Mary Ahrendt			732-3733
Dec 11	Holiday Coffee		Pam Harvala	237-3248
			Chris Luckeroth	732-4416
			Jolly Stuemke	732-7891
Jan 8	Kathleen Lafreniere			732-1910
Feb 12	Darlene Swanson			732-3579
Mar 11	Sandy Thelen			732-7082
April 8	Twyla Tokle			732-2005
May 13	Chris Price			732-0979



We would like to invite all property owners on and around Boot Lake to become part our our Association. If you are currently not a member of the Association and would like to join please send your 2007 dues - \$10 per household to: Pam Harvala, 35362 East Boot Lake Rd, Park Rapids, MN 56470  
Also, if you would like to receive this Newsletter via email send your email address to: [cflucky@wcta.net](mailto:cflucky@wcta.net)

**Boot Lake Association  
35554 E. Boot Lk. Rd  
Park Rapids, MN 56470**