SPECIAL EDITION 2006



Captain Otty's Log

Newsletter of the Otty Lake Association

President – David Reesor

Editor – Bob Melville

PRESIDENT'S MESSAGE *David Reesor*

We had over 100 OLA members attend our AGM July 8th. The highlight of the meeting was a presentation by Sheanna Tinlin. Sheanna is the Program Manager for the Lake Management Planning Program. Her presentation was an Executive Summary of the "State of the Lake" Watershed Report for Otty Lake.

The report was inspiring. It was obvious to everyone in attendance that an enormous amount of work has been done to date and we were all impressed with the content of the report as well as the quality of the information. Even more important, I think, was the realization that a Lake Management Plan was actually a Lake Protection Plan! Who wouldn't want that for Otty Lake?!!

Since the majority of Otty Lake residents were not able to attend the AGM, we thought a special edition of Captain Otty's Log was the next best thing. We want everyone up to date and so we have included the Executive Summary in this edition. We know you will find it interesting reading.

David Reesor 613-326-0094 davidandddaphnereesor@yahoo.ca

EXECUTIVE SUMMARY OF THE OTTY "STATE OF THE LAKE" WATERSHED REPORT" Karen Hunt

The Otty Lake Association is one of the first in eastern Ontario to develop a proactive rather than a reactive lake plan. Many of the lake plans developed for lakes in the United States and Southern Ontario are in response to a crisis. Lakes have often had to become unhealthy and unsafe before action was taken. Property owners on Otty Lake are looking ahead and being proactive by supporting the development of a plan before the quality of life on the lake deteriorates. Although there are concerns about the algae and weed growth on Otty this summer, Otty Lake is still in relatively good shape. Our lake plan is being developed to protect the special lake that Otty is now and we want it to continue to be in the future.

Because Otty Lake is a pioneer in proactive lake management planning, the volunteers and organizations developing the lake management plan have often had to learn as they go. Although a work plan was developed and a timeline set, there can be unanticipated delays and challenges as we move forward. The intention was to be able to distribute the Otty "State of the Lake" Watershed Report to you this summer. There has been a delay in the process and the report will not be available until after a detailed review. This review is critical as it will ensure that the many contributors of information in the report have the opportunity to ensure that it accurately reflects the current state of Otty Lake. The Otty "State of the Lake" Watershed report will be made available to you as soon as possible. Meetings and additional correspondence are planned to ensure you have an opportunity to provide feedback to the State of the Lake Watershed Report.

The subsequent step in the process will be to develop the action strategies to address the issues and concerns on our lake. We look forward to hearing your feedback and ideas.

The following is the text portion of the Executive Summary as presented by Sheanna Tinlin at the Otty Lake Association Annual General Meeting held on July 8th.

Otty "State of the Lake" Watershed Report

Executive Summary

Sheanna Tinlin Program Manager for the *LAKE MANAGEMENT PLANNING PROGRAM.

In 2004 the Otty Lake Association (OLA) and its members began the process of developing a lake management plan (LMP). A LMP is a long-term action plan that is developed and applied by the lake community to protect the special character of Otty Lake.

The first step in the process was to recruit volunteers from the lake community to form the Otty Lake Management Planning Committee (OLMPC). One of their many tasks was to develop and distribute a survey to identify what the lake community valued about the lake. Once the issues and concerns of property owners and lake users were identified, OLMPC volunteers set to work collecting information and learning about the issues.

Over the last year volunteers from Otty Lake have gathered all available historical and current data about the Otty Lake watershed. The <u>Otty "State of</u> <u>the Lake" Watershed Report</u> provides a summary of that information as it relates to the issues that are important to property owners and users of the lake. **The Otty Lake Watershed** (includes all of the land that drains into Otty Lake):

- Is one of 14 subwatersheds of the larger Tay River watershed
- Includes 7 small lakes in addition to Otty Lake, and many wetlands
- Contains generally poor agricultural land and is covered primarily in forest

Otty Lake has:

- A rocky shoreline with thin soil cover and steep slopes
- An average depth of 9 m (30 ft) and maximum depth of 27 m (90 ft)
- 5 streams flowing into the lake: 3 seasonal, 2 year-round
- 1 slow outflow (Jebbs Creek): it takes 3 to 4.5 years for all the water in the lake to be flushed out and replaced with new water
- 31 islands, 11 of which are privately owned

Surface Water Quality

- Higher amounts of total phosphorus, organic nitrogen and ammonia were found which indicates good growing conditions for aquatic plants and algae.
- Some water samples were found with high bacterial contamination although repeated sampling suggests that most bacterial problems are not persistent.

Aquatic Vegetation

- Thick patches of invasive plants grow in the shallow areas and bays of the lake.
- There have been problems in the past with algae blooms (i.e. 2002).
- Little is known about how aquatic plant growth has changed over time.
- Because of high nutrient levels, algae blooms are expected

Groundwater Quality and Quantity

- There is an adequate supply of clean groundwater however the water is generally hard
- There has been an increased demand on groundwater resources as more cottages are converted to permanent homes with dishwashers, laundry facilities, full bathrooms, etc.
- Because of the thin soil cover, the groundwater supply is naturally more susceptible to contamination from activities on the surface

Water Levels

- The flow of water out of Otty Lake is naturally slow.
- The lake level fluctuates naturally depending on rainfall and air temperature.
- Beaver dams in Jebbs Creek can temporarily obstruct the flow of water from the lake.

Development Pressure

- Including Burgesswood and Maple Glen subdivisions, there were 547 shoreline and near shoreline dwellings on Otty Lake in 2005, half of which are permanent homes.
- 6 of the 11 privately owned islands have been developed.
- The conversion of cottages into permanent homes, large homes on small waterfront lots and suburban development threaten the character of the lake.
- There are at least 62 vacant waterfront lots remaining in the two municipalities.

Fish and Wildlife Health

- There has been little recent scientific data collected about the condition of fish and wildlife populations on Otty Lake.
- The lake appears to support a healthy warm water fish community
- Jebbs Creek appears to provide important nursery habitat for fish from Otty Lake and the Tay River.
- Threats to fish and wildlife include the loss of habitat through intense cottage re-development and removal of natural shoreline vegetation.

Mining Rights and Claims

- There are currently no active claims within the Otty Lake watershed although the mineral rights of approximately 25 % of the properties appear to reside with the crown.
- All surface-rights-only land is at risk of future staking, exploration and mining.

Shoreline Protection and Health

- More than 50% of properties on Otty Lake have ornamental shorelines (the natural vegetation has been removed from more than 50% of the shoreline); cleared shorelines no longer function to maintain a healthy lake.
- Properties with altered shorelines on Otty Lake are up to twice as likely to have problems with erosion.

Partnerships in Lake Management

• All government and non-government groups and organizations that have a stake in the health of Otty Lake have the opportunity to participate with Otty Lake residents and users in the development of the lake management plan

Impacts of Boating

- Zebra mussels have become established in the lake but other invasive species such as the spiny water flea may not yet have been introduced.
- It is estimated that the majority of the boating traffic on the lake is motorized.
- Impacts of boating include the spread of invasive species, erosion from boat wake as well as water and air pollution.

Beavers

- There appear to be 3-4 active beaver colonies currently building or maintaining dams along Jebbs Creek every year
- The beaver population in the lake and along Jebbs Creek is thought to have decreased over the years as the availability of suitable trees for food and dam construction has declined.

<u>Responsibility of Landowners in Protecting</u> <u>Lake Health</u>

- Many people are not aware that their activities are harming the lake
- Education and self-regulation will help protect the lake for generations to come

Protect your investment and the lake you love! Get in touch with the OLA to find out how you can help protect Otty Lake for the generations to come.

*The Lake Management Planning Program was developed by the Friends of the Tay Watershed, the Rideau Valley Conservation Authority, the Community Stewardship Council of Lanark County, Tay Valley Township and the Otty Lake Association to support local lakes in the development of lake management planning. In October 2005 Otty Lake became the first of the "core lakes" to be accepted by the Lake Management Planning Program.

The Lake Management Planning Program has received financial support from the Ontario Trillium Foundation, the TD Friends of the Environment, the Rideau Lakes Environmental Foundation and the Community Stewardship Council of Lanark County.

NEW OTTY LAKE MAP David Reesor

At the AGM we displayed a copy of a new Otty Lake Map. The map was computer generated by CGIS and it is a big improvement from our existing map. Because it is computerized, we can't add information to the map. All of the properties around the lake are identified but there were a few property PIN numbers missing. These will appear when the database is updated and will be on the next edition of the map. The street names are quite small but to increase the type size would require increasing the size of the entire map. We felt this was the best possible result and we have printed 400 copies of the map. Over the next year we will distribute copies to our members. If you don't have a copy of our map or you would like a new map now, feel free to contact me and we will find a way to get one to you.

David Reesor 613-326-0094, davidanddaphnereesor@yahoo.ca

McKAY FARM ROAD DEVELOPMENT David Reesor

Stephan Katz and Nikki Pora were exhibitors at our AGM. They have purchased the McKay Farm Road Property and they shared the plans of a proposal they are developing for the property.

We know there are mixed feelings and opinions concerning this potential development. I have been contacted by members and residents with legitimate concerns as well as those who are very positive about what they have heard and learned so far. This was a major discussion point at our last Board meeting July 18th. Both our Land Use Committee and the RVCA will review proposals for the development of this property **once there** are proposals to review and we will make comments and recommendations following that review. At this point there has only been discussion. I think it is good that so many people are involved and concerned. I encourage anyone with ideas or issues to express them in writing as a number of you have done already. I assure you that the OLA will stay closely involved with all plans and proposals for development of the McKay Farm Road property.

ALGAE PROBLEM ON OTTY LAKE – SUMMER 2006

At the AGM there were questions about an algae that Otty Lake residents report is increasing on the Lake. Sheanna Tinlin from the Rideau Valley Conservation Authority has provided the following information.

What kind of algae is it?

The nuisance algae on Otty Lake are most likely *Cladophora glomerata*, a common form of filamentous algae. *Cladophora* is naturally present in many lakes and streams but only

becomes a nuisance when light and nutrient availability give it a competitive advantage.

Will it harm the lake?

The answer is that it could. The effect *Cladophora* will have on a lake depends on how much of it there is. The growth of *Cladophora* is influenced by a number of factors including nitrogen, phosphorus, temperature and sunlight although phosphorous appears to be the key factor responsible for excessive growth.

Phosphorus enters the lake from septic systems and overland by surface runoff. In years when there is a lot of rain, phosphorus from sources such as animal waste and lawn fertilizers is carried into the lake. When phosphorus levels are high, the algae has an unlimited food supply and is able to grow at a faster rate. Reducing the amount of phosphorus available to plants is the most effective way to solve the algae problem.

Zebra mussels may also increase *Cladophora*'s competitive advantage in two ways. Zebra mussels filter the lake water, removing nutrients and particles and increasing water clarity. With fewer particles in the water, sunlight is able to penetrate to a deeper depth which also improves plant growth. In addition to more sunlight, plants receive a substantial supply of nutrient rich feces from the zebra mussel colony.

Increased sunlight and nutrients allow the algae and other plants to grow in large, thick patches. During the day the algae uses the sunlight to produce oxygen. At night these thick mats of algae require oxygen to live, to the disadvantage of other plants and animals that must compete for the limited oxygen supply.

When the plants die off in the fall, large amounts of plant material sink to the lake bottom and begin to decompose, a process which consumes oxygen. When there is a lot of plant material, oxygen supplies at the bottom of the lake can be used up. When oxygen levels become used up the lake becomes "anoxic"- there is no oxygen left for the fish and other animals that live in the lake. This can cause large numbers of fish and other critters that live on the lake bottom to die. As the oxygen is depleted, phosphorus that is trapped in the lake sediments is released into the water and become available as food for plants in the spring. More food means more plants, more plants mean more dead matter that must decompose. More decomposing plant material means oxygen levels may become depleted which causes phosphorus to be released from the sediments. The increased phosphorus increases the algae growth and the cycle begins again. This cycle can be slowed by reducing phosphorus inputs to the lake primarily by maintaining vegetation along the lakeshore to filter out the nutrients before they enter the lake.

LOON SURVEY

Bill McLeish (Area 8B Counsellor) has agreed to become the new contact for the Canadian Lakes Loon Survey on Otty Lake. Sincere thanks go out to Dennis Brock who has looked after this task over the past five years. Bill will need the assistance of other Otty Lake residents to help him gather all possible information about the loons residing on our lake this summer. If you have loon sightings please contact Bill at <u>mcleishbill@hotmail.com</u> or by phone (summer) 613 264-0060 and (fall) 613 836-6277

SHORELINE SURVEY INFORMATION

At the AGM there was considerable interest in the map that had been created from the shoreline survey information collected last summer. Some residents indicated an interest in learning more about the background data. If you would like to view the information collected for the 2005 survey, please contact Karen Hunt (613 264-9273 or <u>mkhunt@perth.igs.net</u>) to make arrangements to meet with her. Your interest and participation in the process of collecting accurate information about Otty Lake is much valued.

AQUATIC VEGETATION SURVEY

As was mentioned at the AGM the Lanark Stewardship Rangers will be back on Otty Lake this summer to help collect information about the aquatic vegetation in the lake. This will allow a comparison with data that was last collected in 1974.

NEWS FLASH – DOCKTALKS AT OTTY LAKE!

Here at Otty Lake we are fortunate to have been offered the opportunity to participate in an excellent healthy waterfront living program (Docktalk) from FOCA) during the month of August 2006. Through this program, landowners are offered site visits which will provide information on water protection issues and solutions specific to their property. The times and number of spaces for site visits are limited so register soon! Contact Barb King ASAP if you are interested.Home office (613) 273-8174, cell (613) 876-8174, E-mail <u>barbaraeking@yahoo.ca</u>

A second opportunity

If there was sufficient interest there is also a possibility that Barb could offer a Docktalk sponsored workshop for Otty Lake residents which too would offer tips and advice on healthy waterfront living. We would need to have a registration of 15 for such a workshop to be viable. If you are interested please discuss with your neighbours and contact Karen Hunt at 613 264-9273 or <u>mkhunt@perth.igs.net</u>

HELP WANTED

Otty Lake residents are always needed to participate in the work of the OLA Board and its committees. If you are interested in volunteering your assistance, please contact: Karen Hunt at 613 264-9273 or <u>mkhunt@perth.igs.net</u> or David Reesor at 613 326- 0094 or davidanddaphnereesor@yahoo.ca

Specific areas where support is currently needed include:

a) Otty Lake residents with background in biology or environmental sciences to assist the lake steward and lake management committee in understanding current conditions of the lake and planning for the future health of the lake.

b) Lake residents interested in the loons of Otty Lake to serve as observers assisting Loon Survey rep Bill McLeish in keeping track of loon activity on Otty Lake.

c) Individuals interested in working with the land use committee to monitor development activity within the Otty Lake area and provide comments on applications for minor variances, severances or re-zoning within the OLA constituency.

d) Communications Committee Chair Bob Melville would welcome additional support to assist with the development and distribution of Capt. Otty's Log

e) The lake management committee continues to seek additional permanent and seasonal lake residents to assist in developing a communitybased plan to protect the long-term health of the lake

f) The Board would appreciate having someone available for legal advice on a volunteer basis.

LOST AT AGM

Anyone who might have inadvertently picked up a reference book entitled Water Wise from the display table at the AGM is asked to return this book to Jack Lynn <u>jlynn@ripnet.com</u> (a copy of the Otty Lake "Paradise Found" CD was also tucked inside the book). Flyers for purchase of copies of the book Water Wise are available from the OLA.

VISITORS TO OTTY LAKE Karen Hunt

Did you notice the "flotilla" of pontoon boats? On August 3 the OLA and the Lanark

On August 3 the OLA and the Lanark Stewardship Council partnered to organize a pontoon boat tour of Otty Lake. The 40 plus participants included representatives from the County of Lanark, Township Councils of Tay Valley and Drummond/North Elmsley, Friends of the Tay Watershed, Ministry of Natural Resources, Rideau Valley Conservation Authority, Mississippi Valley Conservation, Community Stewardship Council of Lanark County and Farren, Bass, Mississippi, Bennett and Fagan, Christie, Kennebec, and Otty Lake Associations. Using Otty Lake as a back drop, participants heard from "experts" about local lake environments and issues related to lake health – and how lake communities can work together to help ensure the long-term sustainability of their lake.

It was a great opportunity for these local groups to exchange ideas and learn together.



Federation of Ontario Cottagers' Associations



A FOCA Docktalk representative will be available to provide confidential, non-regulatory landowner site visits on Otty Lake this August.

Each visit will provide a one-on-one discussion with advice on water protection issues and solutions that are specific to each landowner's individual property needs. Each landowner will receive an information kit of resource materials and give-aways that include a sample of environmentally friendly soap, native wildflower seeds and/or a FOCA drinking water bottle in a re-useable cloth bag.

The site visits are intended to provide pertinent information on:

- Septic system maintenance
- Wildlife habitat enhancement
- Pollution prevention
- Shoreline naturalization
- Threats from invasive species
- Erosion control and prevention

There is no cost for participating in a docktalk visit.

To book a visit or to find out more about this opportunity, contact Barbara King at:

Home office	(613) 273-8174
Cell	(613) 876-8174
E-mail	barbaraeking@yahoo.ca

Visit availability is limited- so book now!

Docktalk is funded by:



Request for 2006 Fee, \$20.00

Please support the Otty Lake Association by sending your annual fee to: Otty Lake Association Box 20122 Perth Mews Mall Perth, ON Canada K7H 3M6

If you are not already a member please consider joining. With your membership our voice is strengthened and we are heard as we work towards improving this lake we all love as well as preserving it for future generations. *Thank you*