Otter Lake Landowners' Association incorporated



Otterlake News



Winter Edition March 2013

Website: http://www.otterlake.cyberus.ca
Email: olla@otterlake.cyberus.ca

From the President's Desk

As I sit drinking my morning coffee while looking out onto the lake, I see a grey owl fly by and a coyote is walking on the ice. Days later, I watched an otter having a blast as it was skidding across the ice. It certainly brought a smile to my face! In a short few months, the lake will be open and the loons will be calling!

IN THIS ISSUE		
From the President's Desk		1
Fish Stocking in Otter Lake		2
The Hot Dry Summer of 2012		3
Membership Form		5
Our Sponsors		6

We had an incident this past summer when a golf course hired a trapper to breach beaver dams in Otter Creek in order to acquire water for their greens. This could have had a very harmful effect on the lake water level had it not been for the fact that beaver dams upstream remained intact, especially a dam inside the culvert where Otter Creek flows beneath Otter Lake Road! We have been in contact with RVCA outlining our concerns and inquiring on their protocol for the above actions by the golf course. See the article on page 2 by our Lake Steward on all the things that happened to Otter Lake last Summer.

We will also be meeting with Rideau Lakes Township to discuss their plan of action with respect to beaver dams. Our major concern is that if beaver dams are breached or removed inappropriately large amounts of possibly contaminated water could enter the lake.

Our main focus is to protect the lake. As you may well be aware, testing of the lake water occurs at least 3-4 times a year by both OLLA and RVCA. All indications of our 2012 water testing tells us that Otter Lake remains healthy...and we are doing our best to keep it that way!

I hope everyone has enjoyed a good winter and...remember Spring is just around the corner.

Phil Mayhew President

Fish stocking in otter lake

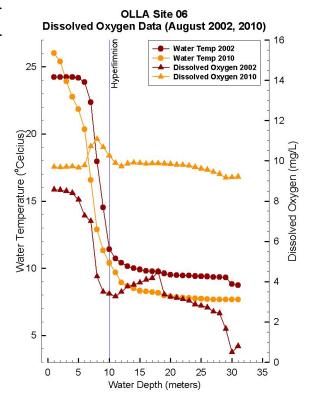
During the past year, your OLLA executive has made two attempts to convince the Ontario Ministry of Natural Resources (OMNR) to stock Otter Lake with cold water fish.

In 1999, OMNR stocked Otter Lake with rainbow trout and splake. In the spring of 2003, a netting survey, consisting of 30 netting sites around the lake, caught 229 fish. Seven of the sites caught no fish at all. The catch results were, lake herring 45.4%, yellow perch 39.3%, northern pike 12.7%, smallmouth bass 1.3%, white sucker 0.4%, rock bass 0.4% and 1 splake. No rainbow trout were caught. Rainbow trout are coldwater fish. In 2003, only 21.4% of Otter Lake's volume was cold enough to support rainbow trout habitat. Measurements made by our Lake Steward in 2012 have shown that this cold water habitat has shrunk, presumably due to global warming, meaning that things are getting worse for rainbow trout, not better. Results of the netting operation, as well as the aforementioned temperature measurements, have led OMNR to conclude that Otter Lake is not a good candidate for stocking rainbow trout.

We then approached OMNR to consider other types of fish which may be suitable to Otter Lake. Their response was that they do not think it is a good idea to introduce new species to lakes as this could be environmentally unsettling.

The dissolved oxygen levels in Otter Lake below the hyperlimnion (the depth below which water temperature does not change significantly during the seasons) are considerably higher now than they were in 2001- 2003 as shown by the graph on the right. Hence, even though the environment suitable for cold water fish such as lake and rainbow trout may be shrinking in many lakes due to climate change, Otter Lake may still be able to support these species of fish if only they could be successfully introduced.

Although we may have seemed to have failed in our goal, we will continue to keep OMNR aware of our lake conditions, and maybe in the future we will qualify again.



Bob Langstaff bob.langstaff@on.aibn.com

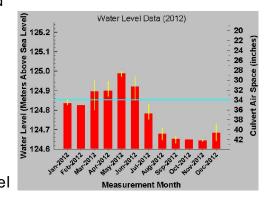
The Hot Dry Summer of 2012

As most of you will remember last Summer was very hot and dry. In fact RVCA announced as early as April that the entire Rideau watershed was in a Level 1 low water condition, and this was increased to a level 2 low water condition in July that remained in effect until October. Many lakes in the area had extremely low water levels as a result of these near drought conditions. Nonetheless, Otter Lake survived the summer quite well. However, there were a number of reasons for this.

As you are probably aware, Otter Lake is a headwater lake that is located to the southeast of Big Rideau Lake. While not a part of the Rideau waterway, the lake is drained by Otter Creek which meanders for about 30 km before reaching the Rideau River between Kilmarnock and Smith's Falls. Otter Lake is fed by at least 10 small streams and because the Lake lies at the juxtaposition of the Smiths Falls limestone plain and the Frontenac axis of the Canadian Shield it is also spring fed, though the significance and location of many of these springs is unknown. However, the lake's only outlet is Otter Creek. For the past several years Otter Lake has had total phosphorous levels of less than 10µg/L, considerably lower than most of the lakes in the eastern Rideau valley watershed. These phosphorous levels coupled with Secchi Disk values of greater than 5 metres and E.Coli levels of less than 3 cfu/100 ml, indicate that the lake is in an excellent state of health. However, a number of events (some natural, some not) took place in 2012 that could have influenced the lake's trophic status and it's overall health.

In April and May we did have significant rainfall (137mm) and in late May beavers built a dam in the culvert that spans Otter Creek on Otter Lake Road. Since this culvert belongs to The Township of Rideau Lakes and they are responsible for it's maintenance the Township removed this dam, but since the Township did not trap any beavers the

dam was quickly rebuilt. The Township therefore opted to remove the dam every 2 weeks. Also in May the Township became concerned that flooding of Otter Lake Road might occur at another culvert where a small stream flows into Otter Lake. The Township removed several beaver dams downstream which resulted in a large volume of water along with considerable sediment and debris to flow into Otter Lake and which resulted in a significant increase in water levels in May as can be seen from the water level graph for 2012 on the right.



At about the same time, and probably also as a result of the heavy rainfall in April and May, a significant beaver dam that holds back water from a wetland area to the west of Road O7 gave way and a large volume of water was released into Otter Lake.

The volume of water was sufficient to completely wash out a culvert and a section of Road O7B.

In June and July we received only 38 mm of rain in total and the weather was very hot. Hence, following our spring "high" in May and June the lake level did begin to drop significantly in July and August (see the graph on previous page), but this was mostly due to evaporation since the beavers were still maintaining the dam in Otter Creek at the Otter Lake Road culvert and reducing the outflow from the lake. Because



of this beaver dam which by July was quite substantial (see picture on left), there was little flow in Otter Creek and water levels in the upper reaches of Otter Creek became incredibly low. This prompted the owners/operators of a golf club that normally uses water from Otter Creek to water their greens to seek permission from individuals who own property adjacent to Otter Creek to allow beaver dams to be breached and beavers trapped in order to increase the volume of water in the Creek. This was done in late July by a licensed trapper. However, because of the beaver dam in the Otter Lake Road

culvert there was still very little outflow from Otter Lake into the Creek and water levels in Otter Lake remained relatively constant throughout the Fall despite the fact there was still very little rainfall.

While all the results of water quality testing for Otter Lake are not yet available, all the indications are that the lake's total phosphorus level and E. Coli concentrations remained low. Hence Otter Lake's overall health in 2012 was still extremely good despite everything that happened with respect to water levels.

Doug Franks Lake Steward djfranks@otterlake.cyberus.ca

Otter Lake Landowners' Association

Membership Form 2013

This is an invitation to all landowners on Otter Lake to become members, or to renew their membership in the association. Your membership is important and helps to meet the cost of monitoring the water quality with the associated laboratory fees, as well as other quality – related lake issues. It also contributes to maintaining OLLA's membership in the Federation of Ontario Cottagers' Associations (FOCA) that looks after cottagers and landowner's interests at Queens Park and the scientific Community.

Our annual membership has remained unchanged for several years and is still only \$30.-

A small price to help keep Otter Lake a viable resource for generations to come

This is a New Membershipor renewal(2013)
Name(s) of Owner(s):
Mailing address:
Road and Cottage number, or civic number
Telephone Numbers: at the lake:Residence
Your e-mail address:
Please Send me the Newsletter by email: Yes No
Amount analogady © 20

Amount enclosed: \$ 30. –
Please return to:
Otter Lake Landowners' Association (OLLA)
#32 - O10, R.R. # 1, Lombardy, ON
K0G 1L0

Thank you for your support in 2013

