



Est. 1890

NEWSLETTER

We're dedicated to keeping Charleston Lake beautiful in every way !

Summer 2010

CLEA funds effects of ingested soft plastic lures on Charleston Lake Trout

The plastic bait issue: Effects of Ingested Soft Plastic Lures on Resident Lake Trout

Soft plastic baits are arguably one of the most popular fishing lures on the market today. Soft plastic baits can end up in natural water by either being carelessly discarded into waterways, or accidentally lost when pulled off hooks by fish or snagged on underwater debris. Typically composed of non-biodegradable synthetic polymers, submerged plastic lures have been observed to remain largely intact for extended periods of time. An influx of these lures into the environment is of concern as there are an increasing number of reports of salmonids (lake trout in particular) being captured with soft plastic lures in their stomach. Once in the stomach, it is thought that plastic lures could potentially obstruct the passage of food from the gut to the intestine, ultimately causing the starvation and death of the fish. Unfortunately, the scope of this problem and the consequence of these obstructions are largely hypothetical. Interestingly enough, since few anglers actually use soft plastic lures to target lake trout, the mechanism that causes these lures to end up in their stomachs is unknown. Fish in Charleston Lake are not immune to this plastic bait issue and reports of such findings have received increased attention as of late. To this end, our research team, based out of Carleton University, will be performing research to gain further insight into this issue.

With support from the Charleston Lake Association, our team has recently started a series of experiments to provide science regarding "soft plastics issue". The "Cooke Lab" is currently conducting experiments to evaluate the "growth" and "decomposition" of ten different types of soft plastic worms at two water temperatures. The final results will help us select a range of different worms that will be strategically placed in locations to monitor fish consumption attempts, via underwater video cameras. Multiple snorkling surveys will also help provide us with an idea of the density of plastic worms along the shoreline. Finally, we also have plans of sampling both smallmouth bass and lake trout to evaluate the health and nutritional condition of fish with and without soft plastic lures in their stomach. Throughout our research, cottagers and/or anglers are encouraged to report lake trout caught with plastic worms in their stomach to the below address, using whichever method is preferred. In your report, please include the total length (from nose to tail), and weight of the fish.

Although not necessary, if possible our group is also interested in obtaining soft plastic bait samples (just put in a Ziploc bag and label with date, species and fish size) and arrangements can be made for personal pick-ups. On May 22nd, 2010 opening day for lake trout, a representative from our group will be available on-site at the Charleston Lake Provincial Park boat launch and clearing stations to record fish lengths, weights and obtain stomach samples.

Contact Information:

Alexander Nagrodski, M.Sc. Candidate

Department of Biology, Carleton University, 1125 Colonel By Drive,
Ottawa ON., Canada

E-mail: anagrods@connect.carleton.ca

Phone: (613) 293-9942

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President's Message

We are now well into spring and have enjoyed the warmest winter on record with very little snow and quite mild temperatures. The lake was ice free by the middle of March and I heard the first loons a few weeks later. We all look forward to the return of summer with its warm sunny days.

Following are some of the issues your Directors will be working on this spring and summer.

Much concern was expressed by fisherman especially last year about plastic bait in fish stomachs and underweight fish. CLA/CLEA has hired a fish biologist from Carleton University, Dr. Steve Cooke to look into this exact problem. I am sure additional information will be garnered through his studies. His report will be ready by January 2011.

A new and improved website should be up and running by the time you receive this newsletter. Check it out at www.charlestonlakeassociation.ca.

Once again swimming lessons, youth camp, the annual regatta and a Family BBQ will be available for your enjoyment this summer. In addition the Doug Hale Golf Tournament will be held at The Village Green Golf and Country Club Saturday August 14th. Details about these events are found in this newsletter.

A reminder to all that a Pleasure Craft Operators License is required by all Canadian citizens. Non Canadian citizens only need a Pleasure Craft Operators License if they will be in Canada for longer than 45 consecutive days (You must have with you proof of residency).

Our Shoreline Committee will follow up on work started last year and will contact others who have expressed a desire to make some changes to their shorelines. Check with one of your directors if you need some advice on your shoreline.

On a more serious note we have just received the report from Reg Genge of Ontario Lake Assessments, on the relationship between zebra mussels and the green filamentous algae we have seen the last few years. Reg Genge's study points the finger at zebra mussels as being a major contributor to this problem. Zebra mussels unfortunately are here to stay. Nutrient loading is the problem. Although nutrient levels have declined over the last decade zebra mussels are offsetting some of these gains. This comes about by zebra mussels depositing nutrients in the narrow littoral zone (shoreline) around the lake. This creates conditions that encourage the filamentous algae growth. A potential new invader is the quagga mussel which can survive in deeper, colder water and needs no hard substrate to attach to. As far as we know, it is not yet present in Charleston Lake. We can't do anything about zebra mussels so it is critical that we make sure as cottagers and residents that we put in place environmentally sound practices to avoid exacerbating the algal problem. Keep a natural buffer strip (15 metres recommended) between your property and the water, do not use fertilizers anywhere near the lake, make sure your septic system is working properly (get it pumped out at least once every 3-5 years) and if you have a holding tank make sure it does not leak and have it pumped when needed. These measures are even more important now as experts agree that at this time there is no biological control of the growing mussel population, the only way to reduce the impact of this problem is to stay vigilant about reducing human sources of nutrients. Although this is a worrisome problem I remember the scourge of Purple Loosestrife and the Gypsy Moths that 10 years ago were going to devastate our environment, but such was not the case.

Last fall the complimentary newsletter that was sent to all non CLA members on the lake in an attempt to boost membership has met some success, with to date about 30 new members and hopefully more to come.

Our commitment as directors is to keep you all informed of the issues important to our lake and together we can deal with challenges that arise in the future.

Have a great summer and please plan to attend our AGM on July 10th 9:30am at Holy Trinity Anglican Church on Lower Oak Leaf road. Our guest speaker will be Dr. Gary Bell from the Nature Conservancy of Canada.

Bill Hallam, 613-553-2621, 613-659-2997 at the cottage

NEWSLETTER



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While the Association makes every effort to ensure the accuracy of information contained in this newsletter, it cannot accept responsibility for errors and omissions. Readers are urged to obtain professional advice before acting on the basis of the material contained in this newsletter.

This newsletter is published regularly By the Charleston Lake Association for its' members and those persons interested in Charleston Lake. Comments and/or submissions are welcome and should be forwarded to The Secretary, Charleston Lake Association, P.O. Box 609, Athens, ON, K0E 1B0

**Newsletter Co-ordinator
& Membership Information**

**Call Bill Borger
613-924-2809**

Getting to Know Charleston Lake's 'At Risk' Residents

Charleston Lake has some of the most ecologically diverse habitats in Canada - home to many rare and 'at risk' plants and animals. Your property could be helping to sustain some of Canada's greatest ecological treasures! Ontario's **Endangered Species Act**, 2007 identifies plants and animals that are in danger of extinction or of disappearing from Ontario. The new ESA provides protection for species and their habitats. Here are a few Species at Risk (SAR) we have here on the Lake:

This spring, if you spot a small, blue and white coloured bird, take a closer look: it could be a **Cerulean Warbler**! Charleston Lake is known by birders as one of the best places in Ontario to spot this beautiful bird. Another bird of special concern is the **Golden-Winged Warbler**- this bird prefers scrubby patches of young forest. When paddling your canoe on the lake, the turtles you see may not be the common painted turtle: **Nothern Map Turtles**, a turtle of special concern that gets its name from the map-like pattern on its shell, can often be seen on the lake. **Eastern Musk Turtle** (*also known Stinkpot*) and **Blanding's Turtle**, two threatened turtle species, may be harder to spot but still call Charleston Lake home. Of all our slithering friends (*none are venomous*), **Grey Ratsnake** (*formerly Black Rat Snake*) of the Great Lakes/St. Lawrence population is one to be proud of! This snake is found primarily in the Frontenac Axis and is the largest snake in Canada. Unfortunately, because of their resemblance to cracks in the road and their ability to *mimic* rattlesnakes, grey Ratsnakes are threatened by human persecution even though they provide great rodent control. Harmless **Milksnakes** are also threatened because of their rattlesnake mimicry. **Butternut** trees are endangered due to a fungal disease that girdles the tree, cutting off its water and nutrient supply. While most trees have the fungus, efforts are being made to locate and protect healthy, resistant trees to aid in the recovery.

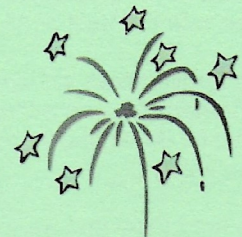
How can you contribute to the protection and recovery of species at risk?

- **Get to know your 'at risk' neighbours**
There are **many more** species-at-risk found in our area. To learn more about Ontario's species at risk and what you can do to help, visit www.omnr.gov.on.ca.
The naturalist staff at Charleston Lake Provincial Park can also provide information on species 'at risk' in our area.
- **Keep it natural: maintain good habitat on your property**
CLA's healthy shoreline assessment provides great information for landowners on how to maintain their property's natural features to help sustain habitat for SAR.

FIREWORKS DISPLAY AND BBQ



On July 3rd, rain date on July 4th
at the Charleston Lake Dock
at 7:00 pm



Display organized by the
Charleston Village Fireworks Committee

ARE
YOU
MOVING
?

Make sure
your
newsletter
moves with
you!

Take a moment to
provide us with your
new address so that
we can ensure unin-
terrupted delivery of
your Association
Newsletter

3 easy ways to do it

Phone:
613-924-2010

E-mail:
wayne.rose@ripnet.com

Mail
CLA
P. O. Box 609
Athens, ON K0E 1B0

Provincial Park Land Acquisition

Charleston Lake Provincial Park is poised to add 650 acres of land between Donaldson Bay and Red Horse Lake. The Sheffield family, owners of the property, have for a long time wanted to keep this land in its natural state and have reached an agreement with the Provincial Park. The Nature Conservancy of Canada (NCC) will broker the deal and with government help and private donations raise the money needed to purchase this property. Three hundred feet of shoreline on Donaldson Bay along with all the land between here and Red Horse Lake will be protected from development. Although the largest portion of protected shoreline will be on Red Horse Lake (22,000 feet) this purchase will create a protected area and continue to provide an undeveloped natural corridor between the two lakes. Charleston Lake is virtually in the centre of the Frontenac Arch landform which is a great wildlife corridor from the Canadian Shield to the Appalachian mountains; known as the Algonquin to Adirondack Corridor (A2A). As a large area of forest and wetlands Charleston Lake contributes significantly to this continental -scale corridor. Although perhaps small in scale this land acquisition by Ontario Parks is another step in connection these two regions.

Our Charleston Lake Management Plan under Keeping Ecosystems Healthy has as one of its objectives "to protect existing large blocks of habitat, both upland and wetland around the shoreline of the lake and in the watershed." Species at Risk, as you will read about in this news letter, will also reap the benefits of this new protected area.

NCC has stated that \$70,000 of the funding for this project must come from private sources. The Charleston Lake Environmental Association (CLEA) has recognized the benefit for Charleston Lake and the surrounding area with the addition of this large tract of land and has pledged \$10,000 towards the \$70,000 of private funding required. To date other organizations have added \$25,000 to this figure. The deadline to raise this money is September 30, 2010. If all goes according to NCC's plan the purchase should be finalized by December 2010.

New Year Resolution

Now here's a new year resolution to consider: spend more time in the hammock this summer. Read more. Sleep more. Leave the lawnmower and chainsaw in the shed. Remove less vegetation. In fact, let your shoreline revegetate itself. Let nature take its course. Relax. Both you and your lake will be healthier for it.

After all, Mother Nature knows what she is doing. Those soggy shorelines you see along the creeks, streams and lakes of the Mississippi and Rideau valleys are mixtures of alder, bulrush, sedge, cattail, pickerel weed, Virginia, creeper and mud sometimes called "wet scrub". These streambank areas are also known as the "**Ribbon of Life**" because about 90% of the plants and animals living in the water need these scruffy-looking areas at one time or another in their life cycle. And they are **as essential to the health of the river as your kidneys are to you.**

Plants are right at home here. Insects, fish, birds and mammals move in where the plants are. These rich areas are nurseries, food cupboards, hiding places and hunting grounds. **They are a buffer against floods, wind and erosion. They filter out large quantities of nutrients washing in off the land.** Vegetated shorelines are small pieces of ecological heaven with the best of all worlds: heat, light, water, land and food.

These fragile areas are under siege in the urban and rural parts of our local watersheds. People cut and fill in and "clean up" and "harden" the shorelines with little thought for the health of the stream or lake. Those types of old-fashioned practices have let us down badly. Clean water, lots of wildlife and stable shorelines are at risk in many parts of the Mississippi and Rideau valleys.

That's not to say that we can't use and enjoy our rivers, lakes and streams. We can but it does take a little shift in attitude towards the unique and fragile Ribbon of Life. It costs nothing and it pays huge dividends in terms of a healthy river system for future generations.

It is time to start respecting our **alders**. Leave the natural vegetation along the shore alone. It has been there through thick and thin for the past 10,000 years and is in perfect harmony with the river environment. If it's already gone or substantially changed, let it grow back by not mowing within five metres of the shoreline (ten metres is even better). **Mother Nature will do the rest.**

Avoid using fertilizers and other chemicals on your property. Common sense tells us that liquids do find their way into either the groundwater (which we drink) or lakes and rivers (which age faster with chemical boosts). Check that your septic system is up to scratch. Check with your municipality, Conservation Authority or Parks Canada about permits needed for any shoreline projects such as docks.

The battle for healthier waterways will be won by thousands of people staying their hammocks longer on the shorelines of every lake, river and creek in Eastern Ontario. Power to the people indeed!

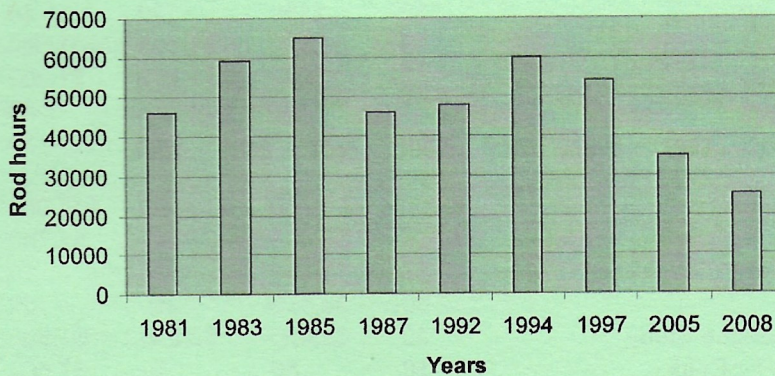
Charleston Lake Creel 2008

Anne Bendig

There were a total of 8 species caught in the Charleston Lake 2008 creel survey similar to the 2005 creel survey. The estimated harvest consisted of lake trout (59%) smallmouth bass (26%), largemouth bass (10%), northern pike (2%), pumpkinseed (1%), rock bass (1%), sunfish (1%), and yellow perch (<1%). The percentage of estimated lake trout harvested declined slightly from an estimated harvest of 63% in 2005 to 59% in 2008. The estimated harvest of largemouth bass also increased from 7% in 2005 to 10% in 2008.

The angler effort for lake trout indicated a declining trend since 1994. Below is a figure indicating angler effort since 1981. It is not surprising that the angling effort would decline in recent years since the number of lake trout being stocked has also declined. This will actually be beneficial to the lake to have the fishing pressure reduced and was predicted to occur.

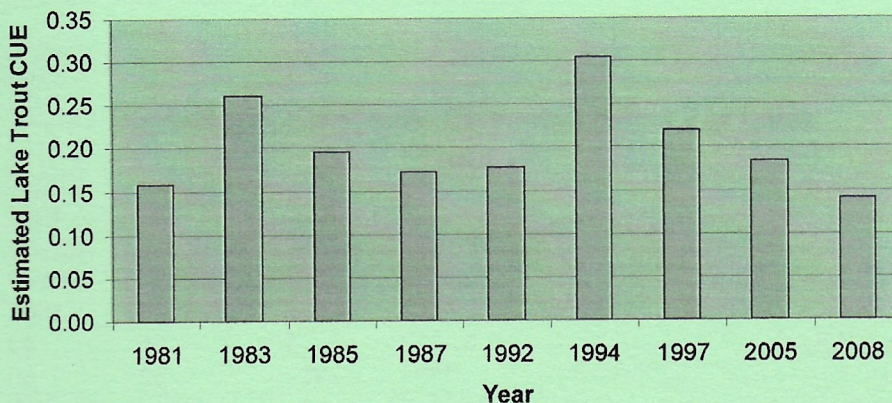
Charleston Lake Creels Estimated Effort For Lake Trout



The estimated number of lake trout caught per rod hour (CUE) also indicated a declining trend since 1994; reaching levels similar to the mid and early 1980's. This is illustrated in the figure below. Based on other lakes in Ontario, the Ministry of Natural Resources (MNR) expects that the number of lake trout caught will decrease for at least 5 years after stopping the stocking of lake trout in Charleston Lake. The last stocking of lake trout will occur in May 2010.

The age distribution of lake trout caught in the 2008 creel ranged from 3-14 years with the majority being 6-8 years which was similar to 2005 where the catch ranged from 3-11 years. The percent native lake trout increased from 41% in the 2005 creel to 57% in 2008 and the mean total length of native lake trout increased from 500mm (20in.) in 2005 to 565mm (22in.) in 2008 and the mean weight was 1583 gm (3.5lb) in 2005 and 1452 gm (3.3lb) in 2008.

Charleston Lake Creel Surveys - Estimated Lake Trout Caught Per Rod Hour (CUE)



The percentage of native lake trout caught in 2008 was 57% compared to 28% stocked native lake trout and 21% stocked non-native indicating that anglers are still continuing to keep a high number of native lake trout.

The angler effort for smallmouth bass indicated an increasing trend since 1981 with the peak occurring in 1997. The estimated number of smallmouth bass caught per rod hour (CUE) also indicated an increasing trend since 1981 with the highest number in 2008. It is not unexpected that there would be an increase in both the effort and harvest of smallmouth bass since the number of lake trout stocked has been decreased.

2010 Financial Report

Combined 2010 Estimate with History

<u>CLEA</u>	<u>2007 A</u>	<u>2008 A</u>	<u>2009 A</u>	<u>2010 E</u>
Opening Unexpended Funds	\$14,685	\$24,854	\$24,184	\$24,198
Donations	\$19,683	\$12,316	\$14,068	\$12,000
Golf - Net Proceeds	\$9,814	\$9,252	\$8,001	\$7,000
Other Income	\$2,194	\$829	\$626	\$500
Total Source of Funds	\$31,691	\$22,397	\$22,695	\$19,500
Adv & Promotion	\$0	\$156	\$0	\$0
Office Supplies & Expenses	\$713	\$2,111	\$1,108	\$1,500
Occupancy Costs	\$1,450	\$642	\$1,809	\$1,200
Accounting Fees	\$1,783	\$0	\$0	\$0
Donations	\$500	\$0	\$75	\$0
<u>Projects</u>				
Creek Restoration	\$10,000	\$10,000	\$10,000	\$10,000
Water Testing	\$7,076	\$3,698	\$7,129	\$3,700
Gananoque Watershed	\$0	\$1,000	\$0	\$0
Creel Cencus	\$0	\$3,460	\$0	\$0
Zebra Mussell/Algae Study	\$0	\$2,000	\$2,560	\$1,550
Fish Research-Dr Cook	\$0	\$0	\$0	\$7,000
Sheffield Property	\$0	\$0	\$0	\$10,000
Total Use of Funds	\$21,522	\$23,067	\$22,681	\$34,950
Ending Unexpended Funds	\$24,854	\$24,184	\$24,198	\$8,748
<u>CLA</u>	<u>2007 A</u>	<u>2008 A</u>	<u>2009 A</u>	<u>2010 E</u>
Opening Unexpended Funds	\$11,545	\$16,044	\$24,848	\$33,183
Membership Dues	\$21,924	\$20,452	\$22,641	\$22,000
Other Income	\$477	\$592	\$535	\$500
Total Source of Funds	\$22,401	\$21,044	\$23,176	\$22,500
Gen & Admin	\$5,853	\$4,037	\$4,399	\$4,000
Environment	\$1,156	\$0	\$0	\$0
Safety	\$1,442	\$2,048	\$3,447	\$2,500
Youth Camp (net)	\$16	\$153	\$151	\$150
Newsletter	\$1,982	\$844	\$2,169	\$1,800
Meeting Expenses	\$359	\$1,087	\$190	\$200
Info Centre	\$2,360	\$2,669	\$2,309	\$2,500
Dues & Advertising	\$835	\$546	\$1,616	\$1,200
Donations	\$2,198	\$560	\$560	\$560
Fish & Wildlife	\$1,377	\$0	\$0	\$0
Misc	\$324	\$296	\$0	\$0
Total Use of Funds	\$17,902	\$12,240	\$14,841	\$12,910
Ending Unexpended Funds	\$16,044	\$24,848	\$33,183	\$42,773
Combined Unexpended Funds	\$40,898	\$49,032	\$57,381	\$51,521

CLA Safety Committee OPP Report

In mid April your safety committee met with OPP officer, Tom Hoppe, a constable with the 1000 Islands detachment, who is responsible for the marine patrols on Charleston Lake. This was a first of such meetings and it was soon clear to us that the opening up of lines of communication in regular spring and fall meetings in the future would be an important benefit to both the CLA and OPP.

Our April meeting gave us the opportunity to discuss concerns and share ideas for improvement, to confirm intended support from the OPP, to review OPP activity on our lake, (in summer 2009 the OPP were on Charleston Lake 7 times with a total of 25 charges), and most importantly it gave us the opportunity to establish clear ongoing lines of communication which will include the meetings mentioned above.

Some important information that Constable Hoppe wishes to pass on to boaters follows:

- The OPP are on our lakes May 24th weekend and between June 1 and September 10 (usually once every 7 to 10 days).
- There is a zero tolerance for not having an approved life jacket on board (\$250 fine for operator plus \$100 fine for passengers).
- Zero tolerance also applies to alcohol related offences. (Canada Criminal Code applies to operating a boat while impaired)
- Fines of \$250 are also given for
 - not having the required proof of competency on board
 - not having the required pleasure craft licence on board and
 - allowing someone under age to operate a boat
- Smaller but significant fines are also given for not having the required safety equipment on board (safety throw rope, whistle, paddle, fire extinguisher, etc. Director Rob Gibson and his committee have spent over \$6200 on new buoys for Charleston Lake to keep all its boaters safe).
- The number to call to report accidents, boating infractions, and impaired boaters, is 1-888-310-1122 and, of course for all emergencies call 911

Special Thanks to:

1. All CLA members who have renewed their membership. If you have not renewed please do it as soon as possible. The Directors would sooner not use up their valuable time chasing late memberships but the fees are needed to continue and maintain what we have on Charleston Lake.

2. Lynn McCaw replied stating that she is the owner of the cottage on Goose Island. The cottage "Idle-While" was built by Case Phillips who drew the "lot" for Goose Island in the 1880's. Today the old cottage is being rebuilt on the same footprint and with similar features.

3. A special thanks to all CLA members who replied to our questionnaire last year regarding your shoreline. Last summer we followed up with a few owners, to figure out how much time it would take, costing, etc. The CLA Shoreline committee has met several times and will try to contact as many CLA members as possible this summer. The committee has discovered that it is a major job but for the health of the lake very much needed. Please bear with us.

Yes!

I / We wish to help keep
Charleston Lake Beautiful
and Healthy

Enclosed is my / our donation of:

\$25____ \$50____ \$75____
\$100____ Other \$____

Make cheques payable to C.L.E.A.

Mail to:
CLEA, Box 609, Athens, ON
K0E 1B0

FOR YOUR INFORMATION



Est. 1890

Notice of Annual General Meeting

Saturday, July 10, 9:30 a.m.

Holy Trinity Church

Holy Trinity Road, (Between Lower and Upper Oak Leaf Roads)

AGENDA

- Minutes of last meeting
- Election of Directors
- President's Remarks
- New Business
- Guest Speaker
- Adjournment
- Presentation of Updated CLA/CLEA Website

Guest Speaker

Dr. Gary Bell

Nature Conservancy of Canada



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The Charleston Lake Associations Information Centre

109 County Rd. 40 (Charleston Rd.)

Tel.: 613-924-0149

Hours of Operation:

June, July & August:

Monday, Thursday, Friday, Saturday, & Sunday
10:00 a.m. to 12 NOON
1:00 p.m. to 4:00 p.m.



ENVIRONMENTALLY FRIENDLY CLEANING PRODUCTS

Using these quality products will significantly reduce lake and groundwater pollution, help maintain your septic system & minimize your family's exposure to potentially dangerous toxic chemicals.

Products may be purchased at:

Kelsey's Marina

Lakeside Lodge & Marina

Charleston Lake Associations info Centre

(109 Charleston Road)

Lansdowne Food Mart

Dockside Restaurant

INFORMATION DAY in the Township of Athens

SPONSORED BY

-Township of Athens-

-Charleston Lake Association-

-Cataraqi Region Conservation Authority-

TOPIC:

**"Protect Your Water Source" Maintaining your
Septic Well Systems**

Due to the success of last year's session, we will be holding this important info day on **Sat. July 10** @ the Joshua Bates Centre in the Township of Athens from 9:00a.m. until noon.

We are inviting anyone from the region to attend to learn how your well and septic system works and what are the regular maintenance steps that are needed to be done, so your system functions in the correct manner. This way as a property owner you are doing your part to protect our environment, as well as possible savings for you, now and in the future.

FREE ADMISSION

Please Register by July 7th 613-546-4228 ext 221
cra@cataraquiregion.on.ca 1-877-956-CRCA ext 221