

St. Lawrence River RAP Update



Watching Mythical Kings Take Flight Over the Mighty St. Lawrence River

Brendan Jacobs,
Raisin Region Conservation Authority

Ospreys (pandion haliaetus) or "fish eagles" are large birds of prey found throughout North America. Named after Pandion, a Greek king of Athens who was transformed into an eagle, this species occupies the top of the aquatic food web. With a diet consisting almost entirely of fish, osprey usually live near ocean coasts and by the shorelines of large lakes and rivers. Boaters in Lake St. Francis may have noticed their large stick nests high up in dead trees, on navigation aids or on several of the artificial nest platforms installed in the area. Unfortunately, Osprey populations declined dramatically in Ontario between 1950 and 1970 as a result of the widespread use of pesticides, particularly DDT, which caused the thinning and breakage of eggshells. With the banning of DDT in 1974, many areas have begun to see a recovery of this species. Like in many other areas in Ontario, we hope to see more osprey

activity in our region within the coming years. In the St. Lawrence River Area of Concern (AOC), a target of five consecutive years of successful osprey reproduction was established and the monitoring of the local population commenced in 2005. "We have been visiting nest sites weekly between May and August, and making note of the presence of adults, number of young and any other observations we might have," comments Brendan Jacobs, wildlife monitoring supervisor with the Raisin Region Conservation Authority. "Preliminary results have been encouraging." In 2008, there were nine active nesting pairs identified within the AOC which resulted in a total of seven young being produced. This monitoring will continue into 2010 and a long-term plan will be developed to keep an eye on the recovery of the St. Lawrence River AOC through the population surveys of this important indicator species. For more information, please contact Brendan Jacobs, Wildlife Monitoring Supervisor, Raisin Region Conservation Authority, Tel: 613-938-3611, Email: brendan@rrca.on.ca.

Two adult ospreys building their nest on the shores of the St. Lawrence.



Marsh Monitoring Program - A Success Thanks to Our Volunteers!

Jordan Ann Kevan de Haan, River Institute

The Marsh Monitoring Program (MMP) volunteers have been monitoring marsh birds and amphibians across Ontario since 1995. Recently, a strong interest for the program has been demonstrated by the citizens of Stormont, Dundas and Glengarry. In the past year, local involvement in the program has increased, and the Stormont, Dundas and Glengarry (S.D.&G) regional MMP coordinators, Katherine Beehler (RAP Implementation Coordinator St. Lawrence River) and Jordan Ann Kevan de Haan (Education Coordinator at the River Institute), are encouraged by the response. "In 2005, there was only one volunteer participating in the MMP in our region. In 2008, 23 routes within S.D.&G. were monitored by enthusiastic volunteers!" Beehler said. "We are seeing more and more dedicated citizens who want to get involved in the conservation and appreciation of our local environment, and we are thankful for their time and commitment to this program." The volunteers range from amateur naturalists to professional biologists and all are enthusiastic to learn and volunteer their time monitoring birds or amphibians in a local marsh. Volunteers report data as well as great anecdotes about their experiences in

the outdoors. Crystal Veenstra, a new MMP volunteer, loves participating in the Marsh Monitoring Program. "I am lucky to have one of the few canoe routes in the area. It's amazing canoeing through the marsh in the evening. I have seen some really cool things, like muskrats, beavers, and so many birds!" Most local conservation agencies and environmental organizations do not have the resources to support the level of monitoring provided by MMP volunteers. All MMP information is submitted to Bird Studies Canada to determine the current quality of wetland health, and to measure the effects of environmental change using marsh bird and amphibian population trends. Much of the new information about population trends in North American bird and amphibian species has resulted from volunteer-based monitoring efforts like the MMP.

The MMP is open to anyone interested in learning how to identify amphibians and/or birds. Although no previous monitoring experience is necessary for amphibians, some birding experience is necessary for monitoring bird routes. Most volunteers spend approximately 10 hours per year monitoring a local marsh. The MMP program provides a unique opportunity for local citizens to contribute to the understanding and conservation of Ontario marshes. A call for new MMP volunteers will be made Spring 2009 and a MMP training session will be held April 2, 2009, 6:30pm-8:30pm at the Raisin Region Conservation Authority (limited space available). If you are interested in participating in the Marsh Monitoring Program, please contact Jordan Ann Kevan de Haan, jkevan@riverinstitute.ca or Katherine Beehler, katherine.beehler@rrca.on.ca.

Volunteering for the Marsh Monitoring Program is great for people who like the outdoors.



Green Gardening

Elaine Kennedy, Cornwall and District Environment Committee

What are we going to do? That is the question on some people's mind when they think of the Cosmetic Pesticide Ban that will come into effect in Ontario this spring. Since a healthy lawn and garden can resist pests much better, I would like to suggest some ideas for keeping a healthy lawn and garden. First, let's look at garden care: 1. Mow high. A lawn mowed high discourages weed and insect invasions. 2. Mulch clippings. This reduces the need for organic fertilizer. 3. Water deeply. Lawns need a deep soaking, preferably after sundown and before 8am. Water only after the top 2 cm of the soil has dried out. 4. Control weeds and insects ecologically. A healthy, well-cared-for lawn out-competes most weeds. 5. Rake. Use a rake to gently remove thatch, the compacted layer of clippings and dead grass which prevents water from percolating to roots, in late spring or early summer. 6. Fertilize in the spring. Use a slow-release, granular, organic fertilizer. 7. Aerate. Aeration is best done in June or the fall to avoid times when heavy seed weeds germinate and may group in the plug holes. 8. A thriving earthworm population is important for a healthy lawn. Earthworms burrow in the soil, breaking down organic material into rich fertilizer, mixing it deeper into the root zone and aerating the soil. 9. Overseed. Stressed areas and bare patches invite weed invasion. In your garden, if you use native plants that you have bought from reputable nurseries, you will cut down on your watering and insect problems. Native plants have learned to adapt to both. However, if you want to have



non-native plants, then the key is to look for environmentally friendly ways to combat your problems. Mulching is the key to reducing your water needs. There are many different types, depending upon what you want to accomplish. There are plenty of good books and articles that will help you figure out what type of mulch to use. The word pesticide is a term that covers insecticides and herbicides. My suggestion is that good old elbow grease can take the place of herbicides. Insects are another matter: different solutions for different pests. Below you will find a few suggestions for dealing with common problems. Check out the internet or your library for other suggestions. For earwigs, roll up a wet newspaper and lay it in infested areas. In the morning, shake them out of the paper into a pail of soapy water. Trap snails with shallow pans filled with stale beer, placed below ground level near the garden. The same beer can be put in a shallow plastic container with holes cut in sides and lid on to keep out rain. Yes, an environmentally friendly lawn and garden need more work. But, isn't one of the main reasons you have a lawn and garden is to get out there, relax, leave your troubles somewhere else and get closer to nature?

SAVE THE DATE! - UPCOMING EVENTS

MARSH MONITORING PROGRAM TRAINING SESSION:

A MMP training session will be held on April 2, 2009, 6:30pm-8:30pm at the Raisin Region Conservation Authority (limited space available). If you are interested in volunteering for the Marsh Monitoring Program, please contact Katherine Beehler, katherine.beehler@rrca.on.ca or Jordan Ann Kevan de Haan, jkevan@riverinstitute.ca, 613-938-6620 x 224 for more information.

RRCA EARTH DAY TREE GIVEAWAY 2009:

Starting at 10:00 am on Saturday April 18th 2009, the Raisin Region Conservation Authority will be giving away free conifer seedlings on a first come first serve basis to celebrate Earth Day. Hardwood saplings will also be available at a nominal cost. For more information, please contact Normand Genier at 613-938-3611.

EARTH DAY SHORELINE CLEANUP:

On Wednesday, April 22nd (Earth Day) between 12pm-1pm, the River Institute will be leading a local shoreline garbage cleanup. For more information, please call Jordan Ann Kevan de Haan, 613-938-6620 x 224

SCIENCE AND NATURE SPEAKER SERIES:

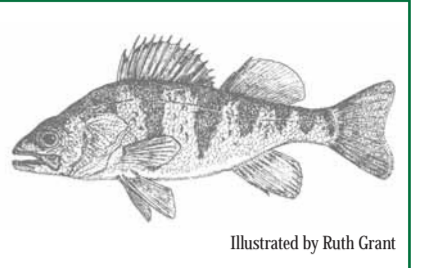
This monthly event is FREE to the public and is organized by the Cornwall Public Library & the River Institute. Upcoming speakers include: Mike Runtz from Carleton University, April 22nd (Earth Day), 7pm Wayne Grady, May 20th at 7pm, "The Great Lakes: A Troubled Future" In order to attend you must register in advance through the River Institute: 613-938-6620. All events are held at the Cornwall Public Library.

More Good News for the Lake St. Francis Perch Population

Alastair Mathers, Ontario Ministry of Natural Resources

There is more good news relating to yellow perch in our area according to the Ontario Ministry of Natural Resources (MNR). Results from recent sampling surveys have shown that yellow perch populations have increased to numbers that haven't been seen since the 1980s. The MNR has conducted two sampling projects that provide information on fish populations in Lake St. Francis: the Index Gillnet Project, and the Nearshore Trapnet Project - each use different sampling equipment and protocols to assess fish community size and abundance. The Index Gillnet Project, which began in 1986, shows that the quantity of small yellow perch has increased, and now exceeds the levels observed in the late 1980s-early 1990s. It also shows an increased abundance of large perch - this observation is expected

to increase even further based on the current trends in small fish with lag time. The Nearshore Trapnet Project started in 2005, and involved nine study areas of Lake Ontario and the St. Lawrence River between Hamilton Harbour and Lake St. Francis. Yellow perch catches in Lake St. Francis were among the highest of all the areas sampled with this sampling gear. Overall, these increases in Yellow Perch populations indicate a significant improvement over the worrying decline in numbers and fish size that occurred between 1998 and 2004. Full reports on the above mentioned projects will be included in the Annual Report of the MNR's Lake Ontario Management Unit, published in March of each year. For more information on this report, please contact Alastair Mathers, MNR, alastair.mathers@ontario.ca



Illustrated by Ruth Grant

That's a RAP!

The St. Lawrence River Remedial Action Plan (RAP) takes an ecosystem approach to solving environmental problems in Cornwall and Glengarry areas by considering the health and needs of fish and wildlife as well as people. Although the Remedial Action Plan has been a part of this community for many years, some people are still unfamiliar with the process and its achievements to date.

The RAP is coordinated by the St. Lawrence River Restoration Council (SLRRC) - a group made up of local citizens, industry representatives and the Mohawk and Community of Akwesasne, as well as municipal, federal and provincial governments (City of Cornwall, Township of South Glengarry, Environment Canada, Ontario Ministry of the Environment and Ontario Ministry of Natural Resources). Similar remedial action plans have been developed for 17 different Canadian Areas of Concern (environmentally degraded areas) in the Great Lakes Basin under the international Great Lakes Water Quality Agreement, and the associated Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem. The St. Lawrence River RAP has completed Stage 1 (problem definition) and Stage 2 (Selection of Remedial Actions) of the RAP process. An update of the original 1997 Stage 2 Document was released in 2008. It includes an update on environmental conditions, a set of revised delisting criteria based on new sci-

ence and understanding of environmental issues, an updated monitoring plan, and a description of the recently completed Cornwall Sediment Management Strategy.

Implementation of the St. Lawrence River RAP will continue to progress by identifying and meeting delisting targets for ecosystem health. A commitment to complete the RAP actions for delisting by 2010 was made in the 2007 renewal of the Canada - Ontario Agreement Respecting the Great Lakes Basin.

With this goal in mind, the SLRRC has formed a sub-committee to begin the final Stage 3 Report. The Stage 3 Report discusses the environmental improvements and monitoring that has been completed within the area of Concern (AOC). Once complete the Stage 3 Report will undergo approval by the SLRRC, federal and provincial agencies, the public and the International Joint Commission. If all the RAP targets are considered met then the St. Lawrence River RAP will be deemed a success and the region will be delisted as a Great Lakes AOC. To date, only two other areas have achieved delisting status in Canada, Collingwood Harbour and Severn Sound.

On Monday, May 4, 2009, from 6:30 to 9:00 PM, the public is invited to attend an information session on the progress of the St. Lawrence River (Cornwall) RAP at NAV Canada (1950 Montreal Rd. in Cornwall) as part of the

Homeowners Can Help Clean up the River

Katherine Beehler,
St. Lawrence River RAP Coordinator

Within the St. Lawrence River (Cornwall) Area of Concern (AOC) potentially failing septic systems have been noted within the Remedial Action Plan as potential barriers to achieving a healthier ecosystem for people, fish and wildlife. In order to assist landowners in determining potential problems with their septic systems, improve water efficiency in their homes, and learn about septic system care, a Septic Re-inspection Program was launched in 2008 for South Glengarry residents living along the St. Lawrence River. According to Normand Genier, Soil and Water Conservation Specialist at the RRCA, "the first year of the program was a success and we hope to double our numbers in 2009." The majority of septic systems in the program area are Class 4 (septic tank and leaching bed) or Class 5 (holding tank) systems. However, there are a greater variety of alternative wastewater treatment technologies now available for homeowners that offer high-quality treatment in limited space. Charlottenburgh Park, located along the shores of the St. Lawrence River in South Glengarry, has taken the idea of alternative wastewater treatment to a whole new level. As part of the sustainable motto that the park boasts, installation of a unique passive sewage treatment system using mostly recycled materials has been completed by the Thompson Rosemount Group (TRG) in association with Queen's University, in Kingston. The system incorporates a conventional leaching bed, a constructed wetland using a gravel and tire shred-filled subsurface flow, and a recycled media system using tire shreds. The project provides an opportunity to research the effectiveness of the three alternative treatment technologies. It features a comprehensive monitoring network to evaluate key operating aspects (e.g. flow) as well as groundwater, surface water and aquat-

Katherine Beehler and Norand Genier from the RRCA measure levels within a septic tank using a sludge judge.



ic organisms. John St. Marseille, the project design and research coordinator, indicates that "this project provides a unique partnership opportunity to demonstrate the use of recycled materials in a sustainable manner and to develop tools to facilitate simple yet creative on-site sewage system solutions." The technology transfer includes a Queen's University graduate studies research project.

16th Annual International Conference on the St. Lawrence River / Great Lakes Ecosystems, put on by the St. Lawrence River Institute of Environmental Sciences.

For more information about this evening event, please contact Katherine Beehler, RAP Coordinator St. Lawrence River (Cornwall) Area of Concern: 613-938-3611.

Great Lakes, Great River

History of the Cornwall Remedial Action Plan (RAP)

1987
The International Joint Commission (IJC) identified the St. Lawrence River as one of 17 Canadian Areas of Concern.

1988 - 1997
A Public Advisory Committee of local residents and professionals worked with the government agency RAP team in consultation with community stakeholders to establish goals, identify issues, and recommend the remedial measures required.

1998 - Present
The St. Lawrence River Restoration Council (SLRRC) leads the implementation of these recommendations.

Today
Work to restore the Area of Concern continues. Focuses include habitat restoration, urban storm water and rural pollution control and the management of contaminated sediment through the Cornwall Sediment Strategy.

For more information please contact the

Remedial Action Plan Coordinator for the St. Lawrence River (Cornwall) Area of Concern:
613-938-3611