



THE BLUE HERON

The Bras d'Or Stewardship Society

P.O. Box 158, Baddeck, Nova Scotia B0E 1B0

VOLUME VI

JULY 2003

NO.2

Measuring the success of a small non-profit stewardship organization is not an easy task. There are really no bench marks to assess the progress, other than the concrete actions taken to achieve the aims and objectives of the society as set out in the memorandum of the association, submitted when registering the society under the Nova Scotia Society's Act.

Looking back over the last six years of the Bras d'Or Stewardship Society's short history, provides an interesting overview of our achievements. The society has forged ahead in its efforts to promote conservation, protection and restoration of the Bras d'Or Lakes and its watershed. Our mandate is straight forward.

There is no doubt that the society has become a credible entity and a force to be respected. Each newsletter provides a voice to our members and the greater public at large on championing the current and future stewardship of the Bras d'Or Lakes. Not to recognize the intrinsic ecological value of the lakes and its watershed is inexcusable.

If you line up each of the twelve issues of the Blue Heron published to date, the

information contained in our newsletter format provides a valuable history of the society's progress. Hence, each issue of The Blue Heron creates a record of the Society's cumulative successes by providing well appointed information regarding our activities and those issues of concern that keep the society moving ahead.

This current issue of the Blue Heron provides much information. Our review of "News Items" provides a summary of current events that focus on the Bras d'Or Lakes. The individual articles provide good information on specific issues that have important ramifications in promoting continued environmental awareness and stewardship concerns.

At times, it seems that the process of saving the lakes is slow and not much has happened. However, when it comes to putting the newsletter together, there is much to report on many different fronts.

The society's success can be measured in terms of its strength in membership, as well as its creditability in the eyes of the public. After six years, the society appears stronger than ever. The attention now being paid to the Bras d'Or Lakes by the public, by other interests groups and on behalf of various government departments is higher than at any time in recent memory. Our success is most apparent. We hope you enjoy this issue of The Blue Heron.

NOTICE

**THE SEMI-ANNUAL
GENERAL MEETING OF THE
BRAS D'OR STEWARDSHIP
SOCIETY WILL BE HELD
AT THE MASONIC HALL IN
BADDECK ON SATURDAY,
AUGUST 16, 2003 AT 2 PM.**

**ALL SOCIETY MEMBERS ARE
WELCOMED TO ATTEND.**

**PLEASE FEEL FREE TO
BRING A FRIEND WHO IS
INTERESTED IN THE FUTURE
STEWARDSHIP OF THE
BRAS D'OR LAKES.**

**John Shaw, a contributor to
the publication
"Oceanography of the
Bras d'Or will speak.**

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Marine Corner

Bras d'Or Plankton Survey Continues

A spring plankton survey of the Bras d'Or Lakes has been conducted for the past four years as part of a cooperative agreement between the Unama'ki Institute of Natural Resources and the Department of Fisheries and Oceans.

Planktonic species are among the most important groups of organisms found in any marine environment. Plankton can be either plant (phytoplankton) or animal (zooplankton). Phytoplankton feeds the zooplankton, which in turn feeds the larger organisms found in the sea.

This spring, aboard the Coast Guard Craft 'Navicula', approximately 78 zooplankton samples were collected using a bongo sampler, equipped with very fine mesh nets. Water temperature

and salinity measurements were taken at each of the locations sampled. At each station, the sampler was towed through the water column for approximately 20 minutes.

Samples were then stored in jars containing a preservative, and taken back to the laboratory at the Eskasoni Fish and Wildlife Commission for identification.

These samples are collected each spring to determine the abundance of fish eggs and fish larvae found within the Bras d'Or lakes. Other zooplankton such as copepods, amphipods, sea fleas, and shrimp and crab larvae are also counted and identified.

Vivian Bushell and Tim Lambert



An Optimistic New Board Member

I am a new board member for the Bras d'Or Stewardship Society. My late husband, Ben, and I have owned a summer property on the Bras d'Or for many years. It was his concern for the safety of the lakes that spilled over into the lives of our family.

While doing research on the Bras d'Or last year for a public speaking project, I became very aware of some of the problem areas around the lakes. The Stewardship Society will now give me the opportunity to learn more about the lakes and the surrounding watershed.

It will be my pleasure to work with the board as they work toward the restoration of the lakes. I look forward to a time when fishers can fish for a living & others can continue swimming and boating for pleasure. This is a legacy our children, grandchildren & great grandchildren deserve.

Mabel MacEachern.

"The Oceanography of the Bras d'Or Lake"

by Pat Bates

The growing cumulative effort of various organizations and individuals directed toward the protection, conservation and restoration of the Bras d'Or Lake is beginning to bear positive results. Over the past five years both senior and local levels of government, native and non-native, have developed a co-operative working relationship focused on long term protection of the Lake. Organizations such as the "Sustainable Communities Initiative" and the "Pitu'Paq" Committee are the forums within which important issues impacting the Lake are discussed and solutions sought. There is a greater emphasis on education and public awareness. It is in this regard, that a particularly valuable work has now been published under the auspices of the Nova Scotia Institute of Science, 2002.

Guest Editor for the publication is Mr. Brian Petrie, and the book features six chapters focused specifically on Physical and Chemical Oceanography, Ecology, Invertebrates, Geology, as well as Coastal Character and Barrier Evolution in/of the Lakes. The publication is a compilation in the most current form of serious scientific investigation into the Bras d'Or Lake.

The publication is very detailed and technical in nature but a most worthwhile text for those interested in the Lake and anxious to have a better understanding of the physical characteristics of this great body of water. For these organizations and individuals dedicated to guarding the Lake from contamination of all forms, as well as depletion of the marine life,

it will be essential reading and help to form the basis of problem solving in the future.

The publication, for those persons interested, is available in limited quantities from the Stewardship Society at a mail-out cost of twenty-seven dollars.

NEWS ITEMS:

Annual General Meeting

The Society's AGM was held in St. Michael's Hall in Baddeck on March 22, 2003. Close to 30 members attended. Bob Bancroft spoke on forest management practices in Nova Scotia. Chairman Pat Bates provided an overview of the Society's activities for the year. A year end financial statement was presented, finding the society in an excellent financial position. This meeting was one of the best to date, due to attendance and content.

MSX Parasite

Eskskoni Fish and Wildlife Commission reported in the early spring 2003 that their oyster inventory could be well wiped out by the MSX parasite. Estimates as high as a \$10,000,000.00 dollar loss, has been reported in the press. To date, little has been done to develop a restoration strategy for the annihilation of oyster beds by the MSX parasite. This bio-invaser was first identified last fall after Jim Crawford, a society board member, found his oyster inventory was infected with an unknown enemy in August 2002.

New Brunswick Meeting

Jim Crawford, a society board member, attended a meeting in late March in Mirimichi, NB that focused on oyster production and accompanying problems. He represented the society. Jim reported that this meeting was highly successful with excellent participation. The MSX parasite was a topic for discussion, as well as restorative measures taken in the Chesapeake Bay to introduce MSX resistance oysters.

Bras d'Or Preservation Foundation

A recent announcement in the Victoria Standard reported that the Royal Bank has donated \$2000.00 to assist the Bras d'Or Preservation Foundation to produce an educational CD containing the information on the Bras d'Or Lakes now available at the Foundation's interpretive center in Baddeck. The CD will be used as an educational tool for all the schools in the watershed. This is a welcomed step forward.

Seismic Testing

The society met on two occasions with principals of the company undertaking seismic testing on land in the Bras d'Or Lakes watershed. Information was provided by the seismic testing team concerning the extent of the seismic tests and details regarding the testing format. Concerns were raised about specific adverse effects of such tests. The conclusion was that these tests would not create any long term adverse effects to the areas in which the tests were to be conducted.

Baddeck Sewage Treatment Plant

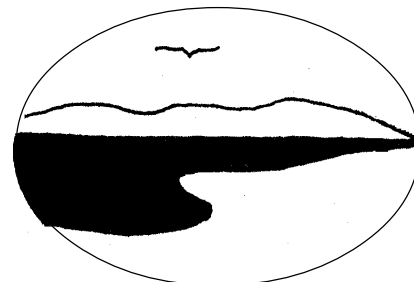
On May 12, 2003, the new 2.5 million dollar sewage treatment plant in Baddeck was commissioned. This plant was completed on schedule. The plant is most impressive. The process for treating Baddeck's sewage is "state of the art" and all who lobbied for this new treatment plant are to be commended. The society urges anyone interested in touring the plant to contact Ron MacIntyre who will proudly show you how the plant works. Ron can be contacted at the following number 902-295-3464. (see page 7)

New Publication

In February 2003, the Nova Scotia Institute of Science published, as part of its ongoing proceedings program, "The Oceanography of the Bras d'Or Lakes". The publication is a series of seven articles by scientists who have studied various components of the Bras d'Or Lakes and its watershed. The information contained in Volume 42 is first class, providing detailed information on geography, fish populations, and physical and chemical oceanography. (see page 2)

Marine Affairs Program

On June 16, 2003, twenty-two employees for the Federal Department of Fisheries spent a day in Baddeck as part of an integrative resource management program. Bruce Hatcher, who heads the Marine Affairs Program at Dalhousie University and Larry Hildebrand from Environment Canada spear-headed this effort to introduce the DFO people to the unique nature of the Bras d'Or Lakes. Pat Bates and Jim O'Brien, the society's board members, acted as guides for the group. We are pleased to have such a high interest shown in the Bras d'Or Lakes.



BIOINVADERS

The Green Crab: More on Marine Bioinvaders

One of the newer members of the fauna of the Bras d'Or Lakes is the European green crab, *Carcinus Maenas*. First reported on the eastern coast of the United States in 1817, this small, aggressive, crab has been spreading episodically northward ever since. In the Gulf of Maine, USA, pulses of northward expansion have been coincident with periods of warmer surface temperatures in the 1930s, 1950s and 1970s.

The green crab was first found in Nova Scotia in 1953, in Pereau River on the Minas Basin and Sandy Point in St. Mary's Bay. During the last decade or so, the green crab has become extremely abundant on most coasts of the Province, and has invaded the Bras d'Or Lakes. It has also been expanding northward rapidly, to the extent that it was found in Prince Edward Island in 1998, and the Gulf of St. Lawrence coast of New Brunswick in 2002. Interestingly, in the 1980s, this species was not considered able to tolerate lower water temperatures than those found on the central coast of Maine, USA, and northern expansion was not considered likely. The rapid range expansion of the green crab in Atlantic Canada in the past few years has led some researchers to suggest that there have actually been several invasions by the green crab, rather than a single introduction to this region due to range expansion from the south.

As its name suggests, the green crab is native to Europe where it is found from Norway to Mauritania. It has also become established in many other parts of the world, including Japan, South Africa, Australia, and both coasts of North America. A very tough species, the green crab eats just about anything, and is a voracious predator of mollusks, especially young bivalves. In its native range, the green crab has significant

impacts on populations of mussels, dogwhelks, and cockles. A single green crab can eat up to 36 mussels per day and is capable of preying on small oysters and scallops. Green crabs are also more dexterous and better able to open different types of bivalve shells than most decapod species native to Nova Scotia. An efficient burrower, the green crab is also capable of digging up clams buried in the sand, and preys on quahogs and soft-shell clams. It is held responsible for the near demise of the fishery of soft-shell clams in the New England states in the 1950s.

Because of the recent appearance of the green crab in Nova Scotia, little is known about its reproductive biology or the ecology of the early life history stages in this region. Green crabs mate in summer, and females produce an egg mass under their abdomen sometime in early spring.

They carry these eggs for a few weeks to a few months, depending on temperature. The early life history of the green crab has 5 free-swimming larval stages. The first four stages are known as zoeae and the last one is called a megalops. The megalops stage is the first stage that actually resembles a crab, and it is this stage that settles to the bottom and metamorphoses into the first of several juvenile crab stages. The duration of larval development can vary greatly with temperature and salinity.

Based on research I did in the Bras d'Or Lakes in 2001-2002, it appears that green crab in the Lakes release their larvae in early July, and larval development takes about 6 weeks. Thus tiny young-of-the-year crabs may be found from mid-August onward. These young crabs grow rapidly and moult several times before winter. Due to the warmer water temperatures of the Lakes, larval development is shorter in the Lakes (6 weeks) than on the Atlantic coast (10 weeks), and juvenile growth is also more rapid.

There are concerns about the potential impact of the green crab on

commercially important bivalve aquaculture operations in the Bras d'Or Lakes. Modifying culture techniques, for example, by protecting young shellfish until they are too large to be easily preyed upon, may help minimize shellfish losses due to the green crab. Further Research into ways of minimizing the effect of the green crab is needed, for the green crab problem is not going to go away. The green crab is an excellent example of what can happen when species become established outside of their native range.

Beth Cameron

Beth is a native of Inverness, who has recently completed a MSc. Degree from the Department of Oceanography at Dalhousie University.

The Bras d'Or Stewardship Society is interested in contributions from our members. If you have something to contribute to the Newsletter or would like to work with the society's board, please let us know. The society is an all volunteer organization that welcomes input from individuals interested in promoting the conservation, protection and restoration of the Bras d'Or Lakes and its watershed.

Local support needed for protecting the Bras d'Or Lakes Watershed

By Susanna Fuller

While important steps are being taken to protect water quality in the Bras d'Or Lakes from improvements and rebuilding of sewage treatment plants to restrictions on dumping waste from recreational boats, protecting the watershed - the land and rivers surrounding the lakes- is key in maintaining a healthy and functional ecosystem.

Many of the fish and bird species inhabiting the estuaries in the Bras d'Or are dependent on the rivers and streams flowing into the lakes. There are several ways to protect the watershed, including reduction and eventual elimination of pesticides and herbicides in agricultural and golfing areas; keeping streams and rivers free of garbage and protecting the land surrounding the watercourses that serve the lakes. Full protection of large tracts of land is arguably the most effective way to protect the watershed, as there is relative ease of enforcement and there are many provincial precedents for crown land protection.

Nova Scotia is approximately 70% privately owned - and the shores of the Bras d'Or are no exception. While private land protection, such as that advocated by the Nova Scotia Nature Trust and the Bras d'Or Preservation Society, serves an important purpose, only small acreages tend to be put aside. As of 2003, Nova Scotia has protected 31 crown-owned areas as Wilderness Areas under the Wilderness Protection Act consisting of about 5% of the provincial landmass. The nationally determined goal is 12% of the province.

The Ecology Action Center, a community environmental organization, based in Halifax, has identified the Humes River area (see map) as one of the ecological hotspots

of Nova Scotia yet to be protected (see also the Public Lands Campaign at www.publiclands.ca). The Humes River contains several important attributes and it is one of the few large tracts of publicly owned land that borders on the Bras d'Or Lakes. Factors that make this area unique include one of the last stands of old growth hardwoods in the province (only 1% of the provincial forests are old growth), the area borders on the Trout Lake Wilderness Area thus increasing the total area of a wilderness corridor in the Cape Breton Highlands and the accessibility of the area from the Trans-Canada highway offers unique possibilities for recreational activities. The proposed boundaries for the Humes River Protected area encompass about 5000 acres.

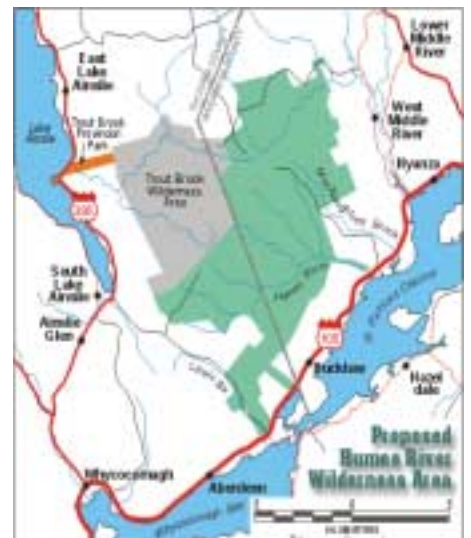
This forest is currently leased to StoraEnso, a paper company with rights to cut 600,000 hectares of Crown land in eastern Nova Scotia. During the 1980's, Stora clear-cut several thousand hectares of hardwood forest on the plateau, but the Humes watershed has been left alone for many years. Recently, however, the construction of logging roads threatens the old growth and intact forest.

The identification of the Humes River area as an ecological hotspot is not enough to convince the province to legislate its protection. Support from local citizens, conservation groups and tourism associations is much needed. "Local input to the public lands protected areas has a lot of pull", says Raymond Plourde of the Ecology Action Centre. Indeed, it is the major motivation for provincial review of areas such as Eigg Mountain near Antigonish and the Ship Harbour-Long Lake on the Eastern Shore.

The protection of the Humes River would bring the total number of protected areas located wholly or partially in Victoria County to five. These areas include the Middle River Protected area, North River Protected Area, French River, as well as the portions of Pollett's Cove Protected Area, Trout Brook Wilderness Area and the Cape Breton Highlands National Park.

Please contact your MLA (Kenny MacAskill) at 902-929-2691, PO Box 40, Englishtown BOC 1HO and the Provincial Minister of Environment and Labour (Ron Russell) at 902-424-6647, 5151 Terminal Road, 6th Floor, PO Box 697 Halifax, Nova Scotia B3J 2T8 to support the protection of the Humes River Wilderness Area.

FOR MORE INFORMATION ON THE HUMES RIVER PROTECTED AREA, PLEASE CONTACT RAYMOND PLOURDE AT 902-429-2202 AND WIC@ECOLOGYACTION.CA



The Bras d'Or Lakes - A Personal View

By Wally Ellison

About 7:00 am one morning in September, a few years ago, I and Fred Smith, the pilot of a small Cessna, lifted off the airstrip at Port Hastings. It was a very cool morning and fog hung over lakes and valleys. We were on our way to photograph some Bras d'Or Lakes coastline features, Seal Island bridge, the Englishtown sand/gravel bar and St. Ann's Bay. Shortly after flying over the Lakes, Fred asked me if I wanted a cup of coffee. Of course I did and waited for him to pass me the thermos. Suddenly, the plane dropped quickly and banked steeply, nearly touching the trees over Bevis Point at the entrance to Big Harbour. After clearing the treetops, we dropped even faster to catch the edge of an airstrip I didn't know existed. Safely down, a few minutes later we were having coffee with Dr. Lawson. Big Harbour is a small indentation near the southwestern end of the Big Bras d'Or, which is the main inlet/outlet for these salty arms of the seas. Big Harbour is like many more tucked away indentations of the coastline of the Lakes.

Stretching for nearly 90 kilometres from tip to tip, this magnificent body of water occupies the whole central part of Cape Breton Island. With a salinity that's only half as salty as the open ocean, the Lakes have been recently discovered by the Dept. of Tourism as Canada's Island Sea, or so the road signs say. Cape Breton is almost divided in two by the Lakes that have numerous channels, bays, harbours and coves. The Lakes, as I prefer to call them, are really one large lake with two natural openings to the sea, the Great Bras d'Or and Little Bras d'Or and one man-made canal at St. Peters. The Great Bras d'Or Channel reminds us of the great sea lochs of the Highlands of Scotland. The Little Bras d'Or Channel is not much more than a winding river, 6 or 7 kilometres long. Because the narrow openings have large interior basins to fill, the tidal range is only 10-12 inches. Many small island groups dot the coastline of the Lakes. The Cranmond Islands, the Marble Mountain Islands, Indian Islands, and many more in the vicinity of Big Harbour Island all add to the scenery of the Bras d'Or Lakes. Occupying some 260 square kilometres, glaciers played a very important role in their development. In places, they are almost 200 metres deep. The main bays and channels and adjacent topographic features trend in a southwest-northeast direction and are tell-tale signs of the significance of their glacial past.

In many of the photographic flights I

made over the Lakes, I marvelled at the sand bar development that was found all along the shorelines. Land-tied islands near Marble Mountain and Big Harbour Island, cusped forelands in the Great Bras d'Or channel and Shunacadie and along the Roberta shoreline, parallel bars in the Middle Cape area all show the variety of development that has taken place on these shorelines. Many islands possess fine beaches - some of my favourites are those of the Marble Mountain islands. Middle River, Skye River and the Baddeck River are the larger streams emptying into the lakes and are building deltas. Outcrops of gypsum cliffs line some of the shores. In places, the shorelines have been too steep and rugged for settlements and farming to take place. Lower Washabuck and the western side of the Great Bras d'Or are very steep-sided.

The Bras d'Or Lakes have provided an important backdrop to much of Cape Breton's history. In 1650, Nicholas Denys established a trading post at St. Peters. In 1854, the realization that the narrow isthmus at St. Peters could be cut through emerged, and soon work on the canal began. By 1869, it was completed and a new trading route was established. But, before the European traders, fishermen, and settlers came, Micmac Indians travelled, fished and hunted the shores of the Lakes. Today, their settlements at Waycobah, Eskasoni, Wagmatcook, and Chapel

Island look out on the Lakes, but in the past many more encampments could be found.

From Sydney, an inside-the-lakes route was established and streamers, like the *Marion*, made regular stops at Baddeck, Waycocomag and St. Peters, finishing at Mulgrave and Port Hawkesbury. In the late 1800's the Grand Narrows bridge was constructed, completing the Intercolonial line from Point Tupper to Sydney. In 1909, on the frozen waters of Baddeck Bay, the Silver Dart made its historical flight. The Lakes have seen ore carriers from Marble Mountain and Little Narrows, floating rafts of trout, salmon, mussel and oyster farms, as well, ice boats, sail boats, power boats, and cruise liners all using the waters of the Lakes.

Indeed, the Bras d'Or Lakes have complex geological history and a colorful social and cultural history. They are one of the great natural wonders of this small island of Cape Breton. As towns and villages and industries grow along the shorelines and as more and more cottages and home development takes place, there is a greater need to be aware of and respect the sensitive areas of this great water environment that practically affects all of Cape Breton.

Wally Ellison is a retired school teacher and photo journalist interested in environmental education.

Baddeck Sewage Treatment Plant

It was noted on page 3 of this newsletter that the Baddeck Sewage Treatment Plant commenced operating in early May 2003. This facility is a sophisticated plant, occupying minimal space below the Baddeck school complex. The plant is completely enclosed, underground, landscaped and bound by a new chain link fence. The description below describes how the plant functions. Anyone interested in viewing the plant and its waste management system is welcome to visit the facility.

This plant sets a bench mark for small community sewage treatment. One can only hope that as time progresses that all communities (Whycocomagh, St. Peters and Eskasoni) contiguous to the Bras d'Or Lakes will follow Baddeck's example and lobby to rally the support of their communities and request funding to construct similar sewage waste management plants.

It is to be noted that this summer, for the first time in many years, there is no distasteful odour being carried by south westerly winds along the perimeters of Baddeck's shoreline. This is a welcomed relief and greatly appreciated.

The Baddeck sewage treatment plant is based on the use of bacterial cultures to treat the wastewater. Bacterial culture absorbs and degrades the contaminants in the wastewater. The contaminants act as food for the growth of the bacterial culture. When the bacterial culture is aged by retention within the system, it clumps together in flocs and this natural tendency enables the bacterial flocs to be separated from the water. The essence of treatment is that the bacterial cultures remove material that cannot be

otherwise physically removed and then the bacteria are separated from the water.

In the Baddeck STP, the bacteria are contained in tanks called batch reactors. The Baddeck STP consists of one equalization tank, four batch reactors, and two sludge digesters. Sewage enters the EQ tank and accumulates until a batch volume is achieved. The batch is transferred to one of the waiting batch reactors where the sewage and the bacteria are blended together to enable the bacteria to absorb and degrade the contaminants. The batch reactor is referred to as a sequencing batch reactor because it sequences through four cycles; fill, aerated react, settle and decant. There are four SBR reactors each cycling, one after the other, through these four stages. Once the batch reactor is filled, no further sewage can enter the cycle. This ensures that the bacterial culture is retained in the batch reactor from one treatment batch to the next. During the react cycle, aeration provides the bacteria with air for respiration. After the aeration time is complete, the aeration is stopped and the bacteria naturally settle to the tank bottom. Once the bacteria have settled, a relatively clear supernatant is produced which can be removed by a decanter. The effluent is transferred by pump to the UV disinfection system where ultra violet irradiation kills potential pathogens in the water. The effluent is then discharged to the Bras d'Or lakes by a 500 foot long outfall with a diffuser.

The bacterial culture uses the contaminants as food and growth occurs. Excess bacteria, if allowed to accumulate, would overflow the system and deteriorate the effluent. Therefore, excess growth is transferred to the aerated digester where natural death and predation reduces the mass of bacteria for disposal. Digestion also reduces the number of pathogens in the sludge and reduces odour potential of the sludge. The digester is a two-staged process to

ensure that sludge is properly digested and to prevent digested sludge from entering the main process train where it would deteriorate the effluent quality. The digested sludge is quite voluminous and to reduce the cost of transportation and to prepare the sludge for composting, it must be dewatered.

Dewatering is accomplished by centrifuge which spins the sludge out of the water at high G force and produces a sludge cake suitable for composting. The sludge will be composted at the old landfill site and will be used to restore the landfill surface.

Bras d'Or Watch

The Society is keeping a close eye on the infilling of a significant pool of water adjacent to the Baddeck Bay. This desecration of natural habitat has been reported to the appropriate authorities.

To date, at least 66% of the original pond has been filled in. Infilling continued this spring as well as sodding over the heavy clay infill to cosmetically disguise the environmental transgression. This breach of the environmental integrity of a natural habitat is being used as an example of gross mismanagement of a private land owner. There is no excuse for this premeditated offense.

If you are aware of any deliberate violations of shoreline integrity due to infilling, in appropriate forestry practices or other acts of environmental destruction, we would like to know about them.

The Bras d'Or Stewardship Society

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Bras d'Or Watch

to report any observed acts,
incidents and violations that
threaten the integrity of Bras d'Or
Lakes please call:

1 800 565 1633

Our Email: stewardship@baddeck.com

2003

BRAS D'OR STEWARDSHIP SOCIETY

- | | | | |
|-----------------|--------------------------|----------|----------------|
| MEMBER | <input type="checkbox"/> | \$15.00 | |
| FAMILY | <input type="checkbox"/> | \$25.00 | |
| CONTRIBUTOR | <input type="checkbox"/> | \$50.00 | |
| SUPPORTER | <input type="checkbox"/> | \$100.00 | <i>Name</i> |
| LIFETIME MEMBER | <input type="checkbox"/> | \$500.00 | <i>Address</i> |

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