

Current News



Issue 6 • Spring 2004

President's Message



As my youngest daughter states every spring once the ice melts: "the bay is alive again". And once again our region becomes the ideal destination spot for boaters, swimmers, and tourists from far and wide who admire and cherish the natural beauty of our area.

The Shediac Bay Watershed Association is a community based volunteer group comprised of devoted members from many walks of life, interested in the protection and restoration of the bay and its watershed. Our group was created by a community desire to assure a healthy ecosystem able to sustain the quality of water of our bay so that future generations can enjoy.

We are currently seeking individuals interested in participating in our Association as full board members or as members of our numerous sub-groups. It takes but a few hours in the year, while the contribution makes a lasting difference in our community.

Our Association has recently received a charitable status designation and is actively seeking donations and partnerships to continue our work as the guardian of the Shediac Bay and its watershed. We often take things for granted. The quality of life that we currently enjoy must not be compromised for any reason. Please help us in our efforts.

Pierre Eric Landry

The SBWA is restoring shellfish this summer!

Lise Auffrey-Arsenault

The Shediac Bay Watershed Association is excited to restore shellfish this summer! The SBWA will be restoring oysters (*Crassostrea virginica*) in Shediac Bay and Cormierville. Not only will we be restoring oysters, but also creating 2 quahaug (*Mercenaria mercenaria*) reproductive sanctuaries in Petit-Cap or Shediac.

The goal of this project is twofold. The first goal is to enhance oyster beds in Shediac Bay and Cormierville. These areas are important oyster producing area in N.B. that never fully recovered from the effect of Malpeque Disease. Secondly, this projects aims to create quahaug reproductive sanctuaries. Populations of this shellfish in the southern Gulf of St-Lawrence have declined over the past five decades largely due to increasing harvesting pressures.

In view of the decline of shellfish populations in many areas of the world, effort has been put into enhancing their abundance because of their ecological, social, historical and economical value. For example, oysters and quahaugs filter the water column thus ameliorating water quality. By creating reef structures, oysters increase biodiversity, provide a viable food source and habitat for many species. Considering these species have an important ecological, historical, sociocultural and economic role in eastern New Brunswick, Shediac Bay and Cormierville would greatly benefit from enhancement effort for these shellfish.

In many areas, for example Prince Edward Island, oyster enhancement work has relied on desilting (sweeping sediments on old shell beds) and adding shell material (shelling) to the seafloor. These methods increase the surface area available for settling larvae thus increasing spat settlement in those areas. Considering the effectiveness of these restoration methods, the SBWA will be utilizing desilting and shelling in Shediac Bay while only shelling will be used in Cormierville.

Two quahaug reproductive sanctuaries will be created in Petit Cap or Shediac. Matthew Hardy, shellfish biologist, found that quahaug reproductive sanctuaries could be of benefit for the species. His findings suggested successful reproduction, and therefore recruitment, would be greater with increased density of large quahaugs in a given area. As such, quahaugs, measuring > 50 mm shell length, will be planted at a density of 100/m². Consequently, a total of 8,000 quahaugs will be planted in these 2 sanctuaries.

Local aquaculturists will be helping the SBWA during this project. The work will begin during the week of June 21st and the anticipated completion date is the end of July. Monitoring of our efforts will also occur at the end of summer-early fall 2004 and spring/summer 2005.

New Brunswick
Nouveau Brunswick

Your Environmental Trust Fund at Work



The paint recycling company
La compagnie qui recycle la peinture

Volunteer Profile

- Ron Robichaud



This issue's Volunteer profile acknowledges Ron Robichaud – a man who has contributed much time and effort during the past 4 years and continues to do so. Volunteers contribute much to the success of not-for-profit organizations.

Employed by the Shediac Bay Marina Inc. for the past 8 years, Ron started helping out with the SBWA because of his concern for the waterways and the environment. Ron has served on the Board of Directors, helped raise funds, and offered support for many projects.

Ron spends most of his free time volunteering, as he is involved with 5 or 6 organizations in the town of Shediac, and 2 organizations in Pointe du Chêne where he makes his home. When he is not volunteering he enjoys driving around, and spending time with his 4 cats, 2 birds, and hamsters.

The SBWA would like to thank Ron for his continued support and enthusiasm with the organization. When asked about the environment, Ron replied "It needs a lot of work."

Economic Importance of a Clean Bay

Erik Christensen

The backbone of Shediac's economy is without a doubt, tourism. The Shediac Bay and Parlee beach Provincial Park attract over 1,000,000 tourists every summer. Local businesses prosper and new life is brought to the community. In order to keep the local economy strong it is essential that tourists keep coming back and this starts with ensuring Shediac Bay is clean. A clean bay means a clean beach. This of course brings more tourists, recognition and revenue for the town of Shediac. A clean bay begins with the area's rivers and the land surrounding them. Over 400 km² of land around Shediac drain into the bay. Sewage, animal waste, and fertilizers from the land run off into the rivers, eventually entering the bay. These substances pollute the water thus endangering ecosystems within the area that keep the bay healthy.



At this point in time, Shediac Bay is facing some serious challenges and there is a call for local residents and tourists alike to do their part. Reduction of pipes into streams, regularly cleaning septic tanks, keeping livestock away from rivers, and not using chemicals for vegetation will help make a difference. Visitors find pleasure in the maritime way of life and love the wonderful beauty New Brunswick is so well known for. It is in our best interests to keep them coming back.

The water crisis

Miguel Pruneau

Many important crises hang over today's world but one of them, the water crisis, is more serious than we think.

During the last century, demand for our precious resource has increased six-fold. As stated by Mr. Koïchiro Matsuura, General Manager of UNESCO on World Water Day, last March 22nd, without better management of the resource two-thirds of humanity will be short of drinking water by the year 2025.



Here are a few things you can do at home to decrease water pollution:

- Avoid pesticides and other dangerous substances in your garden or on your lawn;
- Do not throw garbage in the sewers just because it is practical;
- Prefer ecological products, for example use sodium bicarbonate to clean the toilet and vinegar on the windows;
- Do not throw oil, paint, solvents or other products in sewers.

Contamination problems multiply in Canada especially because of the increasing number of toxic compounds used by each and everyone in day to day living. Let's not forget that the decrease in water quality is directly linked to the way we use the resource.

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Current News

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Membership and Involvement with SBWA

Christina Hunter

The SBWA helps improve the waters of our watershed so that we may continue to enjoy them for years to come. The SBWA is here to help the community and to do so it needs support from the citizens who both inhabit and visit the watershed as well as the many stakeholders found within the watershed's boundaries. How can you support the watershed you say?



Become a board member! The SBWA is looking for committed people who want to participate with SBWA projects. Lending your time as a board member allows you to help shape positive changes that are necessary to protect our watershed.

Volunteering is also a great way to help out the SBWA. Volunteers are needed to help with the many SBWA projects for example water sampling, stream restoration, beach sweeps, etc. Volunteering gives you worthwhile experience in your field of choice, make you feel good about helping out the community, the watershed, and the bay.

If the above-mentioned examples above don't strike your fancy, get in touch with the SBWA to see what else you can do to help out



Did you know? Canadian Shellfish Sanitation Program

Kiley Mitchell and Lise Auffrey-Arsenault

The Department of Fisheries and Oceans (DFO), Canadian Food Inspection Agency (CFIA), and Environment Canada (EC) administer the Canadian Shellfish Sanitation Program (CSSP). The primary goal of the CSSP is to protect the general public from consuming contaminated shellfish. This is achieved by controlling private and commercial harvesting of all shellfish found within Canada. The agency was created in response to an outbreak of typhoid fever, resulting from contaminated oysters, in the United States in 1924-1925 and has existed since then.

A major component of the CSSP is to identify safe shellfish growing areas in which commercial harvesting may occur. Comprehensive sanitary surveys, composed of bacterial surveys (fecal material in growing areas) and shorelines surveys (identify and quantify pollution sources), produce results which are used to classify shellfish growing areas as either approved or closed. Shellfish in approved areas may be harvested while those in closed zones may not. These classifications are revisited again as surveys are conducted regularly

Improving water quality and cleaning pollution sources helps us to increase our access to shellfish growing areas. Not only does clean water increase harvesting areas, but cleaner water supports recreational activities and preserves the ecological integrity of our coastal zones.

For more information please visit: <http://www.ns.ec.gc.ca/epb/sfish/cssp.html>

kids corner

After attending an information session on March 16th, we asked girl guides to talk about what they learned from the SBWA.

"We learned a lot of stuff such as, do not pollute water because then you kill wildlife. please do not overfish because the fish deserve to live. please put fences between your farms and the water so that the animals do not pollute the water. i just want to let everyone know that wildlife are losing their homes so please do not pollute." - Angie Wall

"Please don't disturb oyster beds because the oysters will get mad at you." - Anesta Gallant

The SBWA would like to thank the girl guides for their comments!

Yes, I want to help protect the Shediac Bay and rivers!

Mail to:

Shediac Bay Watershed Association
164 Pleasant St., Suite A, Shediac, NB E4P 2L8

Donation

Name: _____

Address: _____

Ville: _____

Town/City: _____

Postal Code: _____

Telephone: _____

E-mail: _____

Method Of Payment: Cheque
 Cash Money Order

Je voudrais contribuer au niveau suivant :

\$25 \$50 \$100 \$150 \$200
 \$500 \$1000 Other

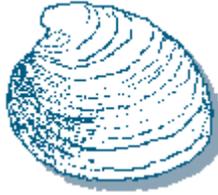
Registered Charity #884295817RR0001.
All charitable donations are tax refundable

Animals in our bay

Quahaug Profile

Name: Also called Hard-Shelled Clams.
Their Latin name is *Mercenaria mercenaria*.

Where found? From the Gulf of Mexico to Cape Cod. Sometimes found in Massachusetts Bay to Bar Harbor, Maine, and the in Gulf of St. Lawrence. Quahaugs are found buried in sediment.



Appearance: Strong and thick triangular shaped shell which are normally white with a purple stain. Unlike oysters that have cupped and lid-like shaped shells, quahaugs have two cupped shells.

Quahaug food: Quahaugs, like oysters, feed on plankton - microscopic plants and animals found in the water column.

Growth: They have a slow growth rate, taking from 4 to 13 years, in Canada, to reach the minimum legally harvestable size of 50mm. They are susceptible to predation until they reach 30mm in size, after which their shells strengthen thus increasing resistance to predators.

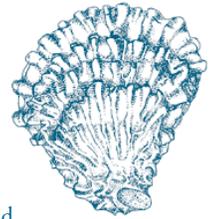
Reproduction: Quahaugs reach reproductive maturity upon reaching a shell length of 25mm to 30 mm. Like oysters, quahaugs are mass spawners (release gametes in water column) but do so over a longer period of time. The larvae will then drift in the currents while feeding on plankton. Facing the same probability of survival as an oyster, once the quahaug larvae have reached maturity, it seeks suitable substrate in which to inhabit. Upon reaching suitable substrate, the quahaug will burrow itself in the sediment (with its foot) and inhabit that area. Quahaugs can live up to 46 years and remain sexually active their entire adult life.

Importance: Although economically important, quahaugs also contribute to the health of the environment by filtering water, and providing a food source to many species.

American oyster

Latin name: *Crassostrea virginica*.

Where found? Gulf of Mexico to Cape Cod, Maine and in the Gulf of St. Lawrence. Oysters are found attached to hard substrates such as rock or shells on the sea floor and can sometimes be found in large numbers.



General appearance: Generally, the shell is thick and rough. Its color varies but is mostly a mix of brown, gray, green, and white. Oysters are bivalves (2 shells) having one shell cupped (houses the body and area where the oyster attaches itself to a substrate), while the other shell is flat like a lid.

Oyster food? Oysters feed on plankton - microscopic plants and animals found in the water column.

Growth: Some oysters have reached lengths of 38 cm (15 inches) and have weighed over 1.35 kg (3 lbs.)! In the Gulf of St. Lawrence it takes an oyster from four to seven years to reach the market-length of 76 mm (3 inches). Oysters grow from May to late November.

Reproduction: Oysters are mass spawners. They release gametes the water column, and for approximately three weeks, the oyster larvae swim and drift in the currents while feeding on plankton. Only a small fraction of the young larvae reach maturity. When they reach the size of a grain of pepper, the larvae will seek a suitable, clean, hard surface to affix itself with a cement-like adhesive. Upon reaching suitable substrate and affixing itself, the oyster will permanently inhabit that area and grow-out.

Importance: Oysters create habitat by being the building blocks for reef systems. By forming reefs, oysters increase biodiversity in an area by providing habitat, shelter and a viable food source. Oysters also filter great amounts of water - up to 34 l per hour! As such, oysters can help improve water quality.

