Fisheries and Oceans Canada
Pêches et Océans Canada

INFOCEANS

THE QUEBEC REGION BULLETIN — JUNE - JULY 2010/VOLUME 13/NUMBER 3

MAURICE LAMONTAGNE INSTITUTE'S
MARINE ORGANISM COLLECTION

The Maurice Lamontagne Institute (MLI) is home to a well-protected treasure trove that continues to grow year after year from the discoveries made by its marine scientists, and even fish harvesters. Its collection room is a genuine museum filled with marine organisms that have been patiently collected and conserved for future generations.

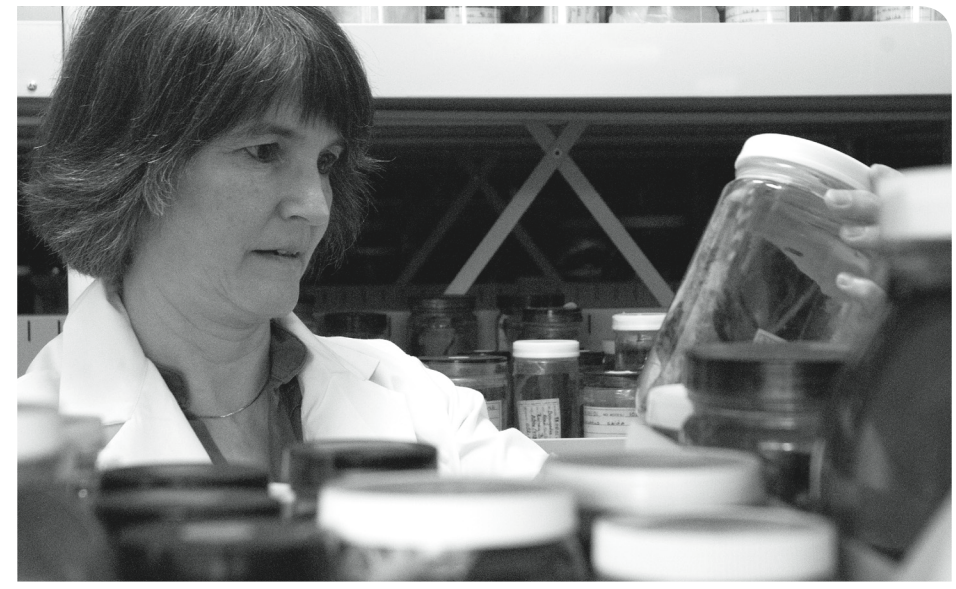
This collection acts as a permanent archive of specimens intended for taxonomic and biogeographic reference for the scientific community. It reflects the tremendous marine biodiversity present in the saltwater portion of the St. Lawrence, in northern Quebec (including Hudson Bay and James Bay) and even in the Canadian Arctic.

The collection was started in the late 1980s and, at the time, contained specimens from three separate collections that were transferred to MLI:

- 2,100 specimens harvested between 1929 and 1980 by scientists working for the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec (MAPAQ);
- 2,600 specimens harvested between 1947 and 1989, held by the Arctic Biological Station in Ste-Anne-de-Bellevue; and
- 884 specimens from the now-closed Centre de recherche en écologie des pêches (CREP).

Since then, the collection has continued to grow thanks to members of the MLI's scientific staff—the most significant contributors to the collection since 1986—who have brought in more than 3,800 specimens gathered from every nook and cranny of the Estuary and the Gulf of St. Lawrence.

Most of the specimens have been preserved whole in alcohol (ethanol), while others, such as molluscs, crabs and starfish, have been dried and preserved intact. The collection room now has 11,633 catalogued specimens, and new ones are added regularly. Most specimens are identified according to species or at a higher taxonomic level.



DFO F. SERVANT

THE COLLECTION'S BIODIVERSITY

Crustaceans are the most diverse group of organisms in the collection with 769 species, including various kinds of crab, shrimp, amphipods, krill and copepods. Molluscs hold second place, with a collection of 417 species, primarily bivalves, gastropods, calamary and squid. Marine worms from the annelid superfamily are also well represented with 400 catalogued specimens. Saltwater fish come next, with 355 specimens.

The collection may be visited and specimens may even be loaned out. To make a request, contact MLI via Roberta Miller, who is in charge of conservation and management.

Roberta Miller
Science

INVESTING IN FISHING HARBOURS ACROSS QUEBEC

In May 2010, Bernard Généreux, Member of Parliament for Montmagny–L'Islet–Kamouraska–Rivière-du-Loup, announced on behalf of the Honourable Gail Shea, Minister of Fisheries and Oceans, a $4.6-million investment earmarked for repair and improvement projects at small craft harbours in coastal communities throughout Quebec.

"Commercial fish harvesters in Quebec need a functional and accessible network of small craft harbours to help them earn a living," said Généreux. "Through this investment, our government is improving harbours so that those who depend on the fishery will have a reliable infrastructure and a stronger local economy for years to come."

Various types of projects will be carried out to improve the safety and operational efficiency of harbours. The investment will be used for projects such as dredging, wharf repair, electrical system upgrading and general maintenance. These projects will be carried out in collaboration with the harbour authorities that manage and operate these facilities for local users.

DFO L. MORENCY

Martin St-Gelais, North Shore Area Director, MP Bernard Généreux and Bernard Beaudoin, Regional Small Craft Harbour Branch Director.

Dispatches 2
New publications 4
Convictions 4

A HELPING HAND
FOR ABORIGINAL FISHERIES

Within the framework of the Atlantic Integrated Commercial Fisheries Initiative (AICFI), the four Mi'gmaq First Nations on the Gaspé Peninsula were able to take advantage of the program for assistance with commercial fisheries enterprise diversification. To be eligible, participating First Nations communities first had to develop business expansion plans and implement more effective fisheries management systems. Moreover, applicants had to contribute at least 10 percent of the total value of their projects.

Via this program, six mid-shore shrimp fishing vessels have been equipped with new energy-efficient fishing gear, including Morgère doors and adapted Cosmos trawls. According to the information provided by the manufacturer, this kind of equipment allows harvesters to save 10 to 15 percent of the energy required for traction. The real savings have not yet been assessed, but according to one individual who uses a newly equipped fishing boat, the motor rpm needed to maintain a given tow speed was lower than for a vessel equipped with conventional gear.

DFO S. COULOMBE

Sylvio Coulombe
Gaspe–Lower St. Lawrence Area

IN THE FIELD
PROTECTING FISH HABITAT

Fisheries and Oceans Canada works to preserve and protect fish habitat in order to maintain recreational, commercial and subsistence fishing levels in fresh and salt water. As part of its activities in connection with the *Fisheries Act*, the Department is increasing awareness and designing tools like best practices guides to help stakeholders carry out their projects without impacting fish habitat.

These tools do not always succeed in sufficiently protecting fish habitat, especially in the case of large-scale projects such as road or dam construction. When fish habitat loss is unavoidable or justified, Fisheries and Oceans Canada can grant an authorization that contains several measures to avoid or lessen the impact on fish habitat.

To ensure that the tools and conditions set out in these authorizations provide adequate protection for fish habitat, the Department has implemented a monitoring and follow-up program. Since 2008, biologists have been hard at work in the field, visiting construction sites and locations where work has been carried out to verify compliance with DFO-required measures, and their effectiveness. They also explain to stakeholders why they must comply with Department requirements. The biologists are also called on to visit certain areas about which people have made complaints.

During these visits, the biologists take action in accordance with the situation observed and the risk to the fish habitat. These actions range from educating stakeholders about the importance of respecting the *Fisheries Act*, to supporting them with advice as they put corrective measures into place or undertake voluntary restoration measures. The biologists work together with enforcement officers to find a solution that will protect fish habitat. However, if no solution is found, the enforcement officers will ultimately issue a ticket for the infraction.

DFO G. DUFOUR

Since 2008, the biologists have visited 167 sites. The results are documented to provide a frame of reference and so they can be analysed at the regional and national scale, and to ensure ongoing improvement of the federal approach used for fish habitat conservation and protection.

These activities will continue to be being carried out this year, and special efforts are being made to draw up follow-up protocol in partnership with the industry and other relevant government bodies.

ARE YOU PLANNING A PROJECT THAT INVOLVES WORK IN OR NEAR WATER?
Find out about any possible repercussions your project may have on fish and fish habitat at www.dfo-mpo.gc.ca in the *Working Near Water* section.

Tools are available to help you with your project at www.dfo-mpo.gc.ca in the *Working Near Water* section under *Quebec Operational Statements*.

Line Choinière and Suzie Roy
Oceans, Habitat and Species at Risk

LOBSTER INDUSTRY PROSPERITY AND SUSTAINABILITY

Over the last few years, the global economic and financial crisis has contributed to the collapse of lobster prices. In response to this situation, in June 2009 Minister Gail Shea announced that a $65-million investment would be made to help the industry as part of Canada's Economic Action Plan.

Of this amount, $50 million has been earmarked for the Atlantic Lobster Sustainability Measures (ALSM) program. The purpose of this program is to develop and implement long-term solutions to consolidate the lobster fishing industry in Quebec and Atlantic Canada.

A simple process has been put into place to gain access to this program's funding. The first step calls for lobster fishers active within a given Lobster Fishing Area to submit a **sustainability plan** describing the conservation measures that will be implemented by all the lobster fishers active in that area. These measures must seek to:

1. Improve the prospects for biological productivity;
2. Improve the reliability of information provided by harvesters; and
3. Reduce the impact on ecosystems.

An external review committee will study the proposals and, depending on the results obtained, projects may receive funding to cover from 20 to 50 percent of the required budget.

The second step involves submitting **applications for funding** for projects geared towards achieving the plan's objectives. Harvesters' organizations must develop and submit proposals that fall into the following categories:

- Stewardship and conservation;
- Restructuring and rationalization of the harvesting sector; or
- Harvester organization governance.

DFO J. C. RICHARD

The external committee will study the projects and make a recommendation to Fisheries and Oceans Canada regarding which projects to fund. Requests will be assessed in accordance with the organization's ability to implement the project, the proposal's measureable impact and the organization's financing structure. Together with their applications for funding, organizations must include their financing package and confirmation of their partners' financial contribution. Projects approved under the ALSM program must be completed by March 31, 2014.

The deadline for submitting sustainability plans and applications for funding is September 30, 2010.

For more information regarding program eligibility, visit:
www.dfo-mpo.gc.ca/lobster.

Cédric Arseneau
Fisheries and Aquaculture Management

SHELLFISH AND CLAMS FOR SUPPER?

EAT SAFELY!

Every year, thousands of harvesters who eat or sell shellfish visit some 300 shellfish beds along Quebec's shores. Unfortunately, not everyone takes the trouble to check whether the shellfish are safe to eat. Yet the risks are very real…

Shellfish feed on plankton by filtering water. If the water in their habitat is contaminated by bacteria, toxic algae or chemical pollutants, shellfish will accumulate them in their flesh, thus making its consumption hazardous to human health.

To reduce the risk of human intoxication, three federal agencies—Environment Canada, the Canadian Food Inspection Agency and Fisheries and Oceans Canada—have pooled their efforts via the Canadian Shellfish Sanitation Program.

WATER QUALITY

Shellfish must be harvested from beds where water quality meets very stringent standards. The marine environment, however, is occasionally polluted by municipal wastewater, wastewater from poorly maintained septic tanks and weeping beds, untreated industrial waste, run-off from farmland, chemical contamination, etc.

ENVIRONMENT CANADA Y. LAMONTAGNE

Environment Canada studies the bacteriological quality of the water at shellfish beds and recommends closing beds where the water is found to be polluted. The Department also works with various other government agencies and local communities to reopen closed beds.

SHELLFISH QUALITY

The Canadian Food Inspection Agency monitors the quality of shellfish in beds by applying the marine biotoxin monitoring program. The Agency recommends that beds be opened or closed depending on the levels observed.

Two toxins are particularly dangerous: paralysing shellfish poison and domoic acid. Both are produced naturally by microscopic algae living in plankton. Eating shellfish containing these toxins can cause disorders of the human nervous system that can be fatal. Other biotoxins produced by algae can cause serious digestive and intestinal problems.

OPENING AND CLOSING OF SHELLFISH BEDS

Fisheries and Oceans Canada opens and closes shellfish beds at the request of either Environment Canada or the Canadian Food Inspection Agency, and notifies all concerned parties. Fisheries officers post bans and patrol closed beds to ensure that no unsafe shellfish are harvested. If necessary, violators are ticketed.

It is the responsibility of people harvesting shellfish to obtain information about the conditions prevailing in the areas where they are gathering and to abide by the harvesting bans clearly indicated on panels posted near the closed beds.

To find out which shellfish gathering areas are safe, call one of the following numbers:

- from Île aux Coudres to Baie-Trinité **1-800-463-8558**
- from Baie-Trinité to Blanc-Sablon **1-800-463-1736**
- from Saint-Roch-des-Aulnaies to Cap-Gaspé **1-800-463-0607**
- from Cap-Gaspé to Matapédia River **1-800-463-4204**
- Magdalen Islands **418-986-3882**

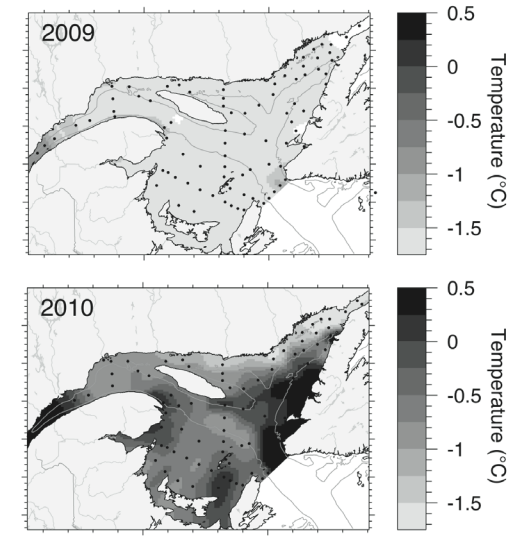
Canadian Food Inspection Agency
Environment Canada
Fisheries and Oceans Canada

THE GULF OF ST. LAWRENCE
UNUSUALLY WARM

The Gulf of St. Lawrence experienced a particularly mild winter in 2010. The air temperatures, which were recorded at nine stations situated near the Gulf, were the hottest on record since 1945 (year one for this series of data), that is, 5.1°C above normal temperatures. Sea ice was also all but absent in the Gulf; the Canadian Ice Service registered the least extensive ice coverage since it started collecting data in 1969.

This climate context formed the backdrop of the annual helicopter-based survey of the physical oceanographic conditions, conducted in March 2010. For the last 15 years, this survey has been carried out every winter using a Canadian Coast Guard Bell 212 helicopter. While the helicopter hovers 30 to 50 metres over the water, a probe is lowered as deep as 200 metres into the water to measure the temperature and the salinity at more than 85 test sites in the Gulf of St. Lawrence.

The physical oceanographic conditions of the winter mixed layer were exceptionally warm in March 2010; this was the first helicopter-based survey to produce such results. The figure shows the temperature of the surface mixed layer for the March 2010 survey together with the results of the March 2009 (a typical year) survey for comparison. Usually, the temperature of the winter mixed layer nears the freezing point virtually everywhere in the Gulf. However, in March 2010, this layer was on average 1°C warmer than usual; temperatures were even higher in certain areas (upwards of 0°C north-east of the Cabot Strait and in the Estuary).



Surface water temperatures, March 2009 and 2010 surveys

The core temperature of the cold water beneath the winter surface layer affects water temperatures throughout the year, sometimes keeping the water below 0°C at the height of summer. The warmer-than-normal water temperatures recorded in March 2010 mean that the core water temperatures expected in summer 2010 will be the warmest ever recorded in 30 years.

DFO M. SAMSON

March 2010 sampling team. The probe used for the survey is in the middle of the group.

Peter Galbraith
Science

QUÉBEC WELCOMES THE
2010 CANADIAN HYDROGRAPHIC CONFERENCE

The Canadian Hydrographic Association in collaboration with the Canadian Hydrographic Service of Fisheries and Oceans Canada is enthusiastically getting ready to open the 36th edition of the Canadian Hydrographic Conference (CHC 2010). The conference, to be held at the Québec City Convention Centre from June 21 to 23, will bring together some 400 members of the international hydrographic community to explore the theme: *Hydrography: Science, technology and people dedicated to the maritime world.*

A COMPREHENSIVE PROGRAM

The program features some forty presentations, training workshops, a poster session, demonstrations aboard hydrographic vessels and a trade show. Conference themes aim to foster recognition of hydrography as a science that contributes to the safety and efficiency of Canada's waterways, delineate underwater territorial boundaries and encourage the development of the Canadian technology industry.

ACTIVITIES OPEN TO THE PUBLIC

Since this year's official opening coincides with World Hydrography Day—established by the United Nations and under the umbrella of the International Hydrographic Organization—CHC 2010 will celebrate this world day by raising public awareness about the importance of hydrography. To this end, the public will be invited to visit the trade show at the Convention Centre and the Canadian Coast Guard hydrographic vessels moored in the Port of Québec's Bassin Louise during the afternoon on Monday, June 21.

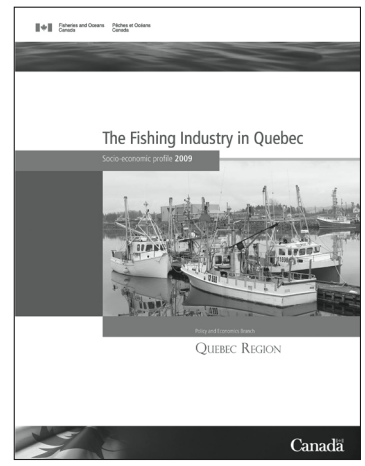
For more information, please visit the event Web site at www.chc2010.ca

Robert Dorais, Conference Chair
Science

New publications

PORTRAIT OF THE FISHING INDUSTRY IN QUEBEC FOR 2009

Fisheries and Oceans Canada recently published a portrait of the Quebec Fishing Industry. This portrait is presented in two documents: the first provides an overview of the primary and secondary sectors of maritime fishing in Quebec; and the second offers a more thorough description of the situation of this industry in each maritime area.



Illustrated by several graphs, tables and maps, these documents provide detailed information on the species landed, the primary fishing harbours and the workforce (harvesters, licences, boats, plants, etc.). Other topics are also covered, such as the demographics of maritime Quebec, aquaculture, seal hunting, freshwater commercial fisheries and maritime fishing in Nunavik.

These documents are available on the DFO, Quebec Region Web site at: www.qc.dfo-mpo.gc.ca under *Regional publications*.

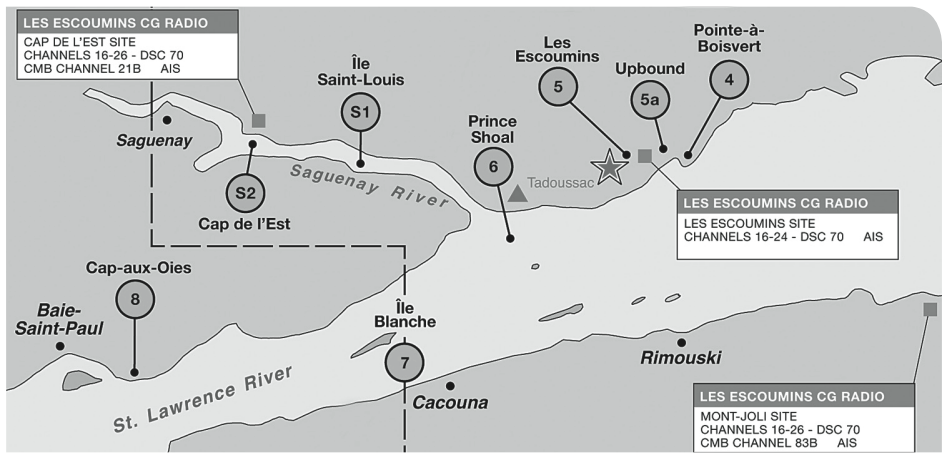
THE CANADIAN COAST GUARD STANDING BY

The Canadian Coast Guard has published a new pamphlet for Marine Communications and Traffic Services (MCTS) in Quebec. Presented as a single chart, it shows the locations of maritime traffic zones, search and rescue stations, Marine Communications and Traffic Services Centres, and mandatory calling-in points.

While this chart cannot be used for navigation, it is a practical complementary document for all navigators.

During the Montreal Boat Show, Canadian Coast Guard determined that there was a great interest in MCTS on the part of mariners.

Canadian Coast Guard – Standing By is available on the CCG Marinfo Web site (www.marinfo.gc.ca) in the section *About Us* under *Services*, and then *Marine Communications and Traffic Services*.



Excerpt from the *Canadian Coast Guard – Standing By* chart

MARINE OUTLOOK

Marine Outlook is a semi-annual publication that reports on the highlights of maritime shipping activity in Quebec.

The most recent issue of *Marine Outlook* (Issue number 26, March 2010) is available on the CCG Marinfo Web site (www.marinfo.gc.ca) in the *Major Issues* section and on the Transport Canada Web site.

Convictions

CONVICTIONS FOR *FISHERIES ACT* VIOLATIONS

Fisheries and Oceans Canada (DFO), Quebec Region, has released the names of fish harvesters who have received fines for violations of the *Fisheries Act*. DFO continues to strictly enforce its zero tolerance policy for violators. The Department has a mandate to protect and conserve fishery resources and is ever vigilant in its efforts to prevent poaching of marine resources. **Fisheries and Oceans Canada encourages the public to report poaching incidents by calling 1-800-463-9057. All calls are confidential.**

OFFENDER/ RESIDENCE	OFFENCE/FINE
Jacques Barriault Havre-Saint-Pierre	Failure to hail out before 8:00 pm the day before a snow crab fishing trip. **$475**
Dany Jean Chute-aux-Outardes	Harvesting softshell clam in a closed area. **$700 + forfeiture of two fishing boats**
Arnaud Landry Havre-Saint-Pierre	Non-compliant logbook for scallop harvesting. **$500**
Clarence Landry **Anne Lévesque** Dalhousie, New Brunswick	Fishing for lobster without a licence and possession of lobster meat. **$2,000 each**
Martin Leblanc Havre-Saint-Pierre	Harvesting whelks with too many traps. **$1,925**
Jean-Yves Mercier Port-Cartier	Fishing for Greenland halibut using nets with a mesh size under 152 mm. **$750**
Éric Michaud Le Bic	Shellfish harvesting in a closed area. Possession of clams over the limit of his licence. Possession of clams below the minimum legal size. Failure to comply with a court order. **$2,100 + prohibition against being within 200 m of the shore of any area closed to fishing, except to travel on public roads, for a period of 36 months**
Louis Vaillancourt Longue-Pointe-de-Mingan	Harvesting whelks with too many traps. Possession of whelks under the minimum legal size. **$1,100**
Rémy Ward Longue-Pointe-de-Mingan	Use of a fishing boat without being designated on the licence. **$200**

Martin Bourget
Communications

THREE NEW NAUTICAL CHARTS FOR THE MONTREAL REGION

Fisheries and Oceans Canada's Canadian Hydrographic Service recently published two new nautical charts for the Canal de la Rive Sud and the Lac Saint-Louis sectors. A new edition for the Lac des Deux Montagnes will also be made available in early summer. Mariners will therefore have to obtain the new charts, which will be kept up-to-date on the *Notices to Mariners* Web site. New electronic navigational charts have also been produced.

Chart 1429 - Canal de la Rive Sud is published at 1:20,000 scale. This new chart covers a portion of the St. Lawrence Seaway that includes the Saint-Lambert and Côte-Sainte-Catherine locks.

Chart 1430 - Lac Saint-Louis is published at 1:25,000 scale. This new chart covers the entire lake, from the Highway 40 bridge at the entrance to the Beauharnois Locks to the Lachine Rapids. It includes all of Île Perrot and the canals surrounding it. The information has been reorganized to provide recreational boaters with a single nautical chart for the lake.

Chart 1510 - Lac des Deux Montagnes retains the 1:30,000 scale. The new updated edition will be available in early summer 2010.

JUNE - JULY 2010/VOLUME 13/NUMBER 3

Published by: **Fisheries and Oceans Canada**
Quebec Region
Regional Communications Branch
104, Dalhousie Street
Québec, Quebec G1K 7Y7
Telephone : 418-648-2239

Director: Caroline Hilt

Editor: Karina Laberge

Editorial committee: Cédric Arseneau, Lyne Beaumont, Paule Blaney, Patrice Dallaire, Réjean Dufour, Micheline Jacques, Guy Laberge, Martial Ménard, Danièle Raby and Pierre Strand

Visual Coordinator: Denis Chamard

Collaborators: Fannie Bernier, Martin Bourget, Line Choinière, Sylvio Coulombe, Robert Dorais, Peter Galbraith, Robert Jinchereau, Nathalie Letendre, Roberta Miller, Suzie Roy and Chantale Thiboutot

INFOCEANS informs the Quebec Region's clients about the policies and programs of Fisheries and Oceans Canada. To subscribe, send your request to the address to the left. Reproduction is permitted, with indication of the source. The editor wishes to be informed in writing of these uses. Also available on www.dfo-mpo.gc.ca under *Quebec region*.

ISSN 1485-6069