



INFOCEANS

THE QUEBEC REGION BULLETIN — OCTOBER - NOVEMBER 2009/VOLUME 12/NUMBER 5

THE INNU DO THEIR PART TO PROTECT SPECIES AT RISK

Over the course of the last two years, members of the First Nations communities have conducted a biological survey of the rich eelgrass beds along the North Shore, on the look-out for species at risk. This Agence Mamu Innu Kaikusseht (AMIK) initiative aims to encourage Aboriginal communities to become involved in protecting species at risk. Funding for the survey is provided by the Government of Canada's Aboriginal Funds for Species at Risk, the Fondation Hydro-Québec pour l'environnement and Mountain Equipment CO-OP's Environmental Fund.

FIELD OPERATION IN THE EELGRASS BEDS

From June 2008 to September 2009, some twenty Innu from Essipit (Les Escoumins), Uashat-Maliotenam (Sept-Îles), Ekuanitshit (Mingan) and Unamen Shipu (La Romaine) received training in fishing techniques and proceeded to survey the fish in a dozen eelgrass beds. It took nearly 3,500 hours of sampling to complete this part of the survey.

Soazig Le Breton, a biologist with AMIK, is pleased with the commitment of Innu communities and Fisheries and Oceans Canada to this project, "Researchers are delighted with the species that were reported here for the first time, said she.

» CONTINUED ON PAGE 2



DFO H. F. ELLEFSEN

Minakuss Odette and Jolyane Briand-Fontaine on the job with an eel caught in one of the Baie de Sept-Îles eelgrass beds

MONTREAL COAST GUARD RADIO STATION: 100 YEARS ALREADY



1915

In 2009, the Canadian Coast Guard's Montréal radio station celebrates its 100th anniversary. Always at the forefront of technology, this station – established by the Canadian Marconi Company in 1909 – has seen many changes in the field of marine communications over the course of the last century. It witnessed marine events that even today inhabit the imaginations of countless mariners.

Now that Coast Guard services are grouped in a single unit, this station is known as the Montreal Marine Communications and Traffic Services Centre. It covers waterways from Buoy S2 to Cornwall, including the Richelieu, Outaouais and Prairies rivers as well as the following lakes: Saint-Pierre, Saint-François, Deux

Montagnes and Champlain. This is the station that receives the largest number of calls for assistance in Canada.

1909: The Montréal Coast Guard radio station was established in the Port of Montréal. It began operations in November under the call sign MTL, which would later become VCA and then in 1915, it was changed again, becoming VFN – the call signal that has been used ever since.

1914: Poor radio reception conditions in the Port of Montréal led to a decision to move the station to the Saint-Michel-de-Laval area. But delayed by the First World War, the work would eventually begin only in August 1921. The new facility was opened on October 10, 1921.



2009

DFO P. DIONNE

1959: With the opening of the St. Lawrence Seaway, the number of ships using this new route grew steadily. The Canadian government put forward the idea of a system that could be used to observe vessel movement, issue pollution warnings, and coordinate search and rescue operation.

1961: Marine services were combined with air services and the Montréal Coast Guard radio moved to Dorval Airport, where it was located until 1978.

1968: The Montréal Marine Traffic Service (MTS) Centre was inaugurated, integrating the marine traffic management services that had until then been managed by the Port of Montréal Harbour Master's Office.

1990: Canadian Coast services in Montréal were brought together under a single roof in Longueuil. The new centre harbours the Coast Guard's Montréal radio station personnel and the marine traffic regulators (MTS). Thereafter, the two bodies were merged, creating what is today known as the Montreal Marine Communications and Traffic Services Centre (MCTS).

Claude Paquette
Canadian Coast Guard

Dispatches

2

4

New publications

4

Convictions

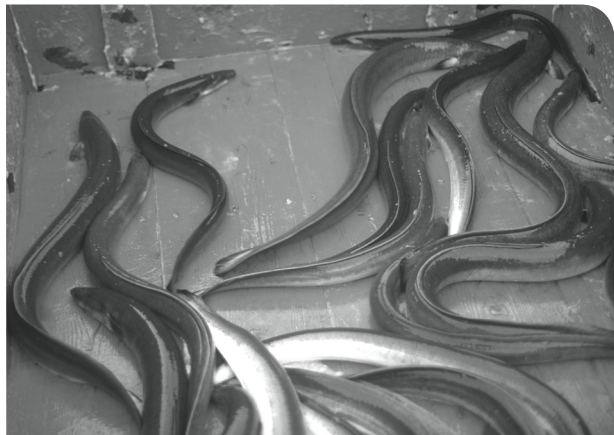
4

EEL RESEARCH WORK PUBLISHED IN SCIENCE

Much remains mysterious about the European eel. Although its spawning site in the Sargasso Sea – located about 500 km south of Bermuda – is well known, the eel spends the rest of its life thousands of kilometres from there in lakes and rivers in North America and Europe and no-one has ever observed or caught eels at sea.

A group of scientists from six countries, which included Maurice Lamontagne Institute's Martin Castonguay, reported in the September 25 issue of the prestigious journal *Science* that they had discovered how eels navigate the first 1,300 kilometres of their annual return migration. Twenty-two eels, each bearing a miniaturized pop-up satellite archival transmitter tag, were monitored closely. In addition to showing their position, which allowed researchers to calculate migration speed, the tags measured data on temperature and depth – useful for gaining a better understanding of saltwater eel habitat – and transmitted the information to satellites.

Technological improvements should ultimately allow researchers to monitor their entire return journey as the eels migrate to their spawning site in the Sargasso Sea.



DFO M. CASTONGUAY

FISHERY OFFICERS AT THE PLAYGROUND

Last July 20, four fishery officers went to Fatima to participate in a clam digging activity organized by playground workers on the Magdalen Islands. Some 200 children from 5 to 12 years of age took part in the activity.

As they made their way to the clam digging site, one officer gave participants an overview of the various measures in force to conserve clams – a minimum legal size (51 mm), the number of clams that may be harvested in a single day (300) and the reason why mollusc areas are sometimes closed. Participants were also given clam measuring tools to raise their awareness.

The young people really enjoyed the activity, which has now been organized three times. It is important to remind them that everyone has a role to play in protecting our oceans. Each small act counts and working together, we will give future generations the opportunity to enjoy the wealth and beauty of coastal areas.



DFO

André Nicolas
Magdalen Islands Area

STUDENTS WANTED A MADE-TO-MEASURE CHALLENGE JUST FOR YOU

Students interested in working in navigation, rescue at sea and prevention in summer 2010 are invited to submit their applications for the Canadian Coast Guard's *Quebec Inshore Rescue Boat Program* (IRB). You can apply beginning in November 2009 and until January 21, 2010.

If you are selected, you will first take part in an intensive 10-day training session that includes rescue simulation exercises as well as first aid and firefighting courses. You will also receive Small Vessel Operator Proficiency (SVOP) certification from Transport Canada and the Canadian Coast Guard's Rigid Hull Inflatable – Operator Training (RHIOT) certification. The students will be provided with room and board as well as transportation and they will be remunerated throughout the training period.

Students who successfully complete their training will then either crew or captain rescue vessels. They will be assigned to one of the six IRB rescue stations in Quebec: Valleyfield, Oka, Beaconsfield, Longueuil, Sorel or Trois-Rivières.

There are all kinds of situations you might have to deal with: watercraft breakdowns, grounding, people overboard, fires aboard vessels, etc. You will also have to keep in mind a number of acts and regulations: the *Canada Shipping Act*, the *Charts and Nautical Publications Regulations*, etc.

This program offers you a unique opportunity to be part of one of the most effective search and rescue teams.

For more information, call 418-648-5330 or 418-649-6830 or visit the www.marinfo.gc.ca site and click the *Students Employment Program* tab in the *Careers* section.



CONTINUED FROM PAGE 1

THE INNU DO THEIR PART TO PROTECT SPECIES AT RISK

The Innu add to our knowledge of the area, acquire technical skills and improve their ability to manage aquatic and marine species. This expertise could ultimately be of interest to consultants or researchers seeking experienced workers."

AN IMPRESSIVE EXPERIENCE, VALUABLE FINDINGS

Eelgrass beds are incredibly productive habitats for the marine environment and for the species that use them for shelter, food, nurseries or incubators. A first sampling campaign, in 2008, revealed the presence of the Atlantic cod and the American eel, both considered to be species at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), and produced a few surprising observations... including a flying fish.

These reports are compiled by scientific researchers like Jean-Denis Dutil at Fisheries and Oceans Canada's Maurice Lamontagne Institute. "The sampling done in eelgrass beds is a valuable source of information, not only in terms of the biology of numerous less familiar species but also regarding the valuable role this habitat plays in their growth and reproduction," says Dutil. Jolyane Briand-Fontaine, a participant in the program in summer 2008, was very astonished by the many discoveries made during the training period. "What most impressed me, was seeing how many fish live so close to our shores."

INCREASED AWARENESS-RAISING AND INVOLVEMENT IN 2009

In 2009, AMIK stepped up its efforts to encourage Aboriginal communities to become committed to the recovery of species at risk and their habitats. An awareness-raising component was added; school workshops, folders, and meetings with the communities and band councils were organised and panels informing the public about species at risk were installed. In addition to increasing the project's visibility, this component gives

all members of the community the opportunity to become involved in conservation efforts while informing them about concrete actions each person can take individually to support the recovery of species at risk and their habitats.

Supported by the Aboriginal Funds for Species at Risk, the project is expected to continue in 2010.



DFO H. F. ELLEFSEN

Juvenile cod caught using a beach seine in an eelgrass bed at Uashat.

DID YOU KNOW...

Since 2004, the Aboriginal Funds for Species at Risk supports the commitment of Aboriginal peoples and organizations in the implementation of the *Species at Risk Act*. The Act recognizes the role that Aboriginal people play in wildlife conservation.

WHAT IS AMIK

AMIK is a not-for-profit organization active in maritime matters in such areas as fishing and marine product processing, marine resource management and research. AMIK represents the interests of nine communities – the seven Innu communities on the North Shore, the Malisiet of Viger and the Gespeg Mi'gmaq.

Myriam Bourgeois, Oceans, Habitat and Species at Risk
Hans Frédéric Ellefsen, North Shore Area

NEW ENGINEERING SERVICE FOR SMALL CRAFT HARBOURS

Recently, a new group was set up at the Regional Small Craft Harbours Branch (SCH). The new engineering service was created following a functional review of this Fisheries and Oceans Canada program.

The new unit aims first and foremost to carry out the technical component of the SCH program with increased effectiveness and efficiency. Consequently, more engineering projects can be carried out by the Branch, rather than by Public Works and Government Services Canada (PWGSC), thus reducing the number of intermediaries.

Stéphane Dumont, regional engineer in charge of this unit, says now that the necessary expertise is available in-house and by respecting established budgetary limits, SCH will have the freedom to *accomplish* projects rather than *having them accomplished* by others. PWGSC engineering expertise, which in the future will focus on larger-scale projects, will be more efficient.

A GROWING TEAM

The group will be composed of ten individuals: a regional engineer, three principal engineers, two principal technicians, a draughtsperson and three assistant technicians.

Two project engineers, Élisabeth Marceau and Yves Gingras, have already been hired, both were formerly employed at PWGSC. These two engineers are not just project managers, they also design several of the projects since their expertise is in the area of harbour and marine engineering.

For now, and until these positions are permanently filled, the principal technicians are Mario Nicol and Alex Harvey. The assistant technicians are based in three of the region's sectors. Louis Bouffard is based on the Magdalen Islands, Étienne Bouchard in Sept-Îles and Frédéric Labrecque in Gaspé. The remaining positions will be filled during the course of fall 2009 and winter 2010.



DFO L. BEAUMONT

Stéphane Dumont, Yves Gingras, Élisabeth Marceau and Mario Nicol. Absent: Alex Harvey.

The engineering group will be responsible for two kinds of projects:

- Projects involving the maintenance and repair of existing structures deemed to be *essential* to the program to improve them and make sure they address the needs of users.
- Projects involving the divestment component for harbours that are deemed to be *non-essential* to the SCH program; in such cases, the team provides engineering expertise to assess the value of the work that needs to be done on the harbours concerned in compliance with the rules governing the cession of assets.

The program's budget has been increased temporarily to facilitate accelerated implementation of these two components over the next two years, which will increase the usual work load. Conclusion: A lot of projects on the drawing board for this new Small Craft Harbour engineering group!

Lyne Beaumont
Small Craft Harbours

ROGER SIMON: 30 YEARS OF SERVICE AT THE ISLANDS OFFICE

After a 35-year career with Fisheries and Oceans Canada, including 30 years on the Magdalen Islands, Roger Simon, Magdalen Islands Sector Director, will be retiring on October 29.

Arriving on the Islands on July 1, 1979, Roger Simon dealt with countless files throughout his career, some of which were particularly dear to him. The one he is most proud of is inarguably lobster conservation, a success story that came about through close collaboration between the industry and the Department. Since conservation measures have been in place, the situation of the lobster fishery has been very good, and it continues to improve steadily.

Roger Simon also left his mark on the issue of seal hunting by taking on a major challenge: ensuring the surveillance of the hunt while under the vigilant eye of environmentalists and the international media. The harsh and sometimes dangerous conditions encountered by fishery officers called for sustained team work.

Over the years, Roger Simon built crucial ties with the fishing and aquaculture industry, with groups dedicated to the protection of coastal environments and with the tourism industry. These ties will remain his best memory of his time with DFO.



DFO

Annie Vigneau
Magdalen Islands Area

MARKING THE ST. LAWRENCE YEAR ROUND

In spring and fall, the Canadian Coast Guard is busy with buoy tending operations, laying and lifting the buoys on the St. Lawrence.

DANGEROUS OPERATION

Because buoys are installed to mark the safe limits of channels and hazards to shipping, buoy tending is a dangerous operation. Operators have to be able to manoeuvre their vessel regardless of the conditions, ever alert to the dangers to which the crew are exposed. The crew's safety must always be a priority, particularly when the deck is icy, water is dripping from the buoys and the ship is in motion.

SPECIALIZED VESSELS

Twice a year, the Canadian Coast Guard undertakes operations to install, remove and check the positions of about 1,200 buoys marking channels and hazards from Beauharnois to Blanc-Sablon and from the Gaspé coast to the Magdalen Islands as well as on the Outaouais, Prairies, Richelieu and Saguenay rivers and in Deux Montagnes and Saint Louis lakes.

These buoy tending operations are carried out by five Canadian Coast Guard units: CCGS *Martha L. Black*, CCGS *Tracy*, CCGS *Île Saint-Ours*, ACV *Sipu Muin* and ACV *Mamilossa*. The crews have to keep in mind the limits imposed by weather and ice conditions, and be ever ready to deal with equipment breakdowns. Moreover, their territories are vast and the work must be completed within a very short time.

Each buoy tending unit has the specific capacities needed for its own operations. For instance, CCGS *Tracy* and the air cushion vehicles share characteristics like a shallow draft, a lower freeboard so buoys can be loaded and unloaded more easily and their stability at sea. As for CCGS *Martha L. Black* and CCGS *Tracy* their decks were specially designed to facilitate manoeuvres and they have higher capacity booms.

A BUOY FOR EVERY SEASON

Winter conditions in Quebec make it necessary to change buoys seasonally. Winter spar buoys are long, unlit devices specially designed to withstand ice impact and return rapidly to the surface when submerged by ice.



DFO

The crew of CCGS *Tracy* must remove the ice from the lifting rings on this lighted summer buoy before it can be brought aboard. It will be replaced by a winter spar (on the deck).

As for summer buoys, they have more sophisticated structures and systems. On the St. Lawrence waterway, most buoys bear lights and integrated radar reflectors. In some sectors, they may also be equipped with sound aids – bells or whistles in fishing areas, and radar responder beacons (RACON) in areas where there is commercial shipping.

BUOY TENDING INFORMATION ON THE WEB

You can now find out when buoys will be changed in spring and fall. Just go to www.marinfo.gc.ca, where clicking the *Buoy tending* tab will take you to the *Seasonal buoy tending operations* page. The information is updated daily. You can also check out the *Summary of buoy tending operations*, where the status of seasonal buoy tending operations is provided for each work sector.

DID YOU KNOW...

There are more buoys on the waterway in summer (363) than in winter (252). Winter spars are set in strategic places where the danger and need for markers are greatest. Also, some sectors and water bodies are closed to navigation in the winter.

Ghislaine Gendron, Danielle Fortin and Claude Lapierre, Canadian Coast Guard
Nathalie Letendre, Communications

CALL FOR PROJECTS IN AQUACULTURE

FOR ACRDP

Fisheries and Oceans Canada reminds the public that the period for submitting project proposals for the *Aquaculture Collaborative Research and Development Program* (ACRDP) continues until **December 1, 2009**, with funding for accepted projects set to begin in April 2010.

This program supports projects proposed by our partners in the aquaculture industry (aquaculturers and/or associations) by granting funds for collaborative research with joint funding. The industry is always required to contribute at least 30%, of which at least 7.5% must be a cash contribution. The final amount of the requisite industry contribution is based on the ACRDP contribution.

To meet selection criteria, the proposed projects must aim to improve the competitiveness of Quebec's aquaculture industry and include the participation of an industry partner. Information about ACRDP is available at www.dfo-mpo.gc.ca, in the *Science* section under *Research and Monitoring Activities*.

The ACRDP is a Fisheries and Oceans Canada initiative that aims to increase the level of collaborative research and development activity between the aquaculture industry and the department, and in some instances with other funding partners. ACRDP is an industry-driven program that teams industry with DFO researchers. Projects will be conducted at DFO Research facilities or possibly at industry partner facilities.

FOR AIMAP

The *Aquaculture Innovation and Market Access Program* (AIMAP) is also launching its call for proposals for 2010-2011. This program funds aquaculture projects that contribute to sustainable production, increased diversification, market access or developing green technology.

Proposals for 2010-2011 will be received until mid-December 2009. For more details, visit <http://www.dfo-mpo.gc.ca/aquaculture/sustainable-durable/innovation-eng.htm>.

New publications

RESEARCH WORK FRONT AND CENTRE

The Fisheries and Oceans Canada Web site regularly offers new easy-to-read articles on research work conducted by the Department's scientific teams throughout the country.

These articles – over one hundred – deal with a host of subjects connected to Fisheries and Oceans Canada's activities and responsibilities. For instance, you can find out what research is being done in your region or elsewhere in Canada on subjects that are of interest to you.

The following articles, dealing with projects that took place in Quebec, were added last summer:

- "Rechargeable" scallops on your plate?
- Mackerel, a tough fish to follow
- Genetics and the redfish fishery
- Do bigger fish produce the best offspring?
- "If you build it, they will come": bivalve aquaculture boosts local biodiversity
- Copepods in the cold: Things to know in order to study Arctic and Subarctic zooplankton dynamics
- Can gases be used to offset greenhouse gas emissions?
- The Arctic Ocean seen from space: Images that offer a wealth of information

You will find all the articles in the *Science* section of the Fisheries and Oceans Canada Web site (www.dfo-mpo.gc.ca) by clicking the *Feature article* tab. New articles are added frequently. To make sure you don't miss anything, come back regularly, or subscribe and you will be sent information whenever a new article is posted!

OCTOBER - NOVEMBER 2009/VOLUME 12/NUMBER 5

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, Johanne Benoit-Guillot, Patrice Dallaire, Réjean Dufour, Guy Laberge, Martial Ménard, Danièle Raby and Annie Vigneau

Visual Coordinator: Denis Chamard

Collaborators: Myriam Bourgeois, Martin Bourget, Martin Castonguay, Charley Cyr, Hans Frédéric Ellefsen, Danielle Fortin, Ghislaine Gendron, Viviane Haerberlé, Claude Lapierre, Nathalie Letendre, André Nicolas, Claude Paquette and Sylvi Racine.

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

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/ HOME	OFFENCE/FINE
LOBSTER	
Louis Clarke Grosse-Île	Possession of an egg-bearing female lobster. Possession of lobster under the minimum legal size. \$1,750
Pierrot Cyr Étang-du-Nord	Possession of lobster under the minimum legal size. \$1,500 + suspension of fishing licence for the first four days of 2010 season.
Luc Thériault Havre-aux-Maisons	Possession of an egg-bearing female lobster. \$1,000
SNOW CRAB	
Donald Déraspe Havre-Aubert	Having fished several times in an area other than that authorized by the licence. Using a trap without a biodegradable escape mechanism. Using a trap without a valid tag. \$5,000
SEAL	
Steeve Boudreau Havre-aux-Maisons	Failing to bleed a seal for one minute before skinning it. \$750 (\$250 chacun)
Grant Turnbull Raymond Turnbull Grosse-Île	
Daniel Chiasson Étang-du-Nord	Failing to palpate a seal's cranium to confirm that it was crushed. \$250
Paul Chiasson Étang-du-Nord	Exceeding the limit of six seals. Failing to bleed seals for one minute before skinning them. Failing to palpate a seal's cranium to confirm that it was crushed. \$1,000
Réal Déraspe Pointe-aux-Loups	Exceeding the limit of six seals. \$300 (R. Déraspe)
Murray McKay Grosse-Île	\$200 (M. McKay)
Léo Leblanc Havre-aux-Maisons	Possessing full metal jacket rifle cartridges aboard the vessel. \$200
Hugo Noël Fatima	Slaughtering seals while only in possession of a temporary assistant sealing licence. Failing to crush seals' crania. Failing to sever seals' two axillary arteries to bleed them. \$1,000
Allison Rankin Grosse-Île	Failing to palpate seals' crania to confirm that they were crushed. \$500
SHELLFISH	
Yves Vigneau Havre-Aubert	Shellfish harvesting in a closed area. \$200

Martin Bourget
Communications