

INF()CEANS

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Marc Demonceaux Assistant Commissioner Canadian Coast Guard Quebec Region

BEST WISHES FOR 2012

In 2011, Fisheries and Oceans Canada initiated a process of transformation which will continue into 2012. By implementing a program to create change, we will be able to perfect the way we conduct our activities, provide our services and manage our scientific and regulatory mandates. This program will also improve the way we manage and allocate available resources.

These changes will go a long way to help attain the objectives of the Government of Canada by ensuring that departmental policies, programs and services remain relevant, effective and efficient over time, in a way that complies with the priorities in place.

More than ever, we need to work together and partner with many of you to guarantee economically prosperous maritime sectors and fisheries, sustainable aquatic ecosystems, and safe and secure navigable waters.

On behalf of all Fisheries and Oceans Canada and Canadian Coast Guard employees in Quebec, we would like to extend to you and yours our best wishes for health and happiness in the new year.



Ariane Plourde Acting Regional Director General Fisheries and Oceans Canada Quebec Region

Canadian Coast Guard

1962 - 2012

THE CANADIAN COAST GUARD CELEBRATES 50 YEARS IN THE MAKING

On January 26, 1962, Leon Balcer, Minister of Transport Canada, announced that his Department's fleet of ships had been reassigned to a new organization: the Canadian Coast Guard (CCG).

Fifty years later, the Quebec Region of CCG has remained true to its motto, *Safety First*, *Safety Always*, by meeting the growing needs of its clients and partners who sail the St. Lawrence River and Gulf and even the Arctic waters.



It is therefore with pride that I invite you to join us as we celebrate 50 years of a history marked by challenges, brilliant success stories and difficult lessons.

Several events are in the works to do justice to this anniversary, including our participation in the 2012 edition of the *Rendez-vous naval de Québec* (www.rendezvousnaval.com).

In 2012, we will also be publishing an information capsule in each issue of *Infoceans* featuring the Canadian Coast Guard's 50 years of service and the activities planned to highlight this milestone.

Remember to keep an eye out for the new \$50 bill featuring the CCGS *Amundsen*, our world-renowned research vessel, which will shortly be issued by the Royal Canadian Mint.

In closing, I would like to thank everyone who helped us make our waterways safer, sounder and more prosperous.

Marc Demonceaux, Assistant Commissioner Canadian Coast Guard

Dispatches



New publications



Convictions

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Dispatches

NEW NAUTICAL CHART OF THE ST. LAWRENCE ESTUARY

The Canadian Hydrographic Service (CHS) of Fisheries and Oceans Canada has published a new nautical chart of the St. Lawrence Estuary covering the area from Île du Bic to the Gros-Cacouna harbour on the south shore and from the pilot boarding station at Les Escoumins to Cap de la Tête au Chien in Charlevoix on the north shore.



After consulting pleasure craft operators and merchant marine shipping stakeholders, CHS decided to create a new chart for the sector with a horizontal layout in order to include the mouth of the Saguenay and the Île du Bic sector. This new nautical chart (number 1320) replaces the previous chart (number 1235) of this area. It includes insets illustrating in greater detail the pilot boarding station and the Gros-Cacouna harbour, which had previously been represented on the adjacent chart.

The new chart also incorporates new bathymetric data, collected using modern technologies such as the multibeam sounder, which provides a detailed view of the ocean floor. Department hydrographers also used a new series of mapping software to compile all the information retrieved from databases and accelerate the process for producing successive charts.

Please note that information about nautical chart updates is available via *Notices to Mariners*, which are published on www.notmar.gc.ca. You can subscribe to this free service and receive all the updates and corrections for the charts you use.

Canadian Hydrographic Service charts are available in hard copy and electronic formats from authorized chart dealers. Visit www.charts.gc.ca for further information.

Robert Dorais Science

NORTHERN SHRIMP IN TIME FOR DINER!

An international team of researchers has shown that regardless of where they live—in the Gulf of St. Lawrence, the Gulf of Maine or all the way north in the Barents Sea—northern shrimp have adapted to their environment to provide their larvae with optimal conditions for survival. This little shrimp is a master strategist!

The team with researchers from Canada, the United Kingdom, the United States, Denmark and Iceland have put together a series of projects designed to document the link between inter-annual and inter-regional variations in the northern shrimp's reproductive cycle and the oceanographic conditions in which northern shrimp larvae evolve. The team also compared isolated populations remote from one another.

Since the 1990s, Patrick Ouellet and Louise Savard, of Fisheries and Oceans Canada, have been interested in the population dynamics of northern shrimp (*Pandalus borealis*) in the Gulf of St. Lawrence. This crustacean is of major socio-economic importance to the region. Because shrimpers' catches are closely linked to population abundance and the annual recruitment of juvenile shrimp, the researchers sought to understand the factors that influence these elements.

A SINGULAR REPRODUCTIVE CYCLE

Female northern shrimp lay their eggs in early fall and carry their fertilized eggs under their abdomen until the following spring, at which point their larvae will hatch. Ocean water temperature influences the eggs' incubation time. For instance, colder waters will delay hatching. Larvae then migrate towards the surface to feed on plankton for the first few weeks of their lives. This early phase can be crucial to their survival and therefore to the recruitment of future populations.

The researchers wondered whether adult shrimp were synchronizing larval hatch with phytoplankton bloom. When hatching is synchronized with phytoplankton bloom, the larvae have a better chance of finding enough of the food that is essential to their survival and development. In contrast, if hatch time is not synchronized with the phytoplankton production, the larvae face food shortages and as a result, many larvae will die, which will have a direct impact on recruitment in subsequent years.

Phytoplankton bloom occurs at approximately the same time every year, with the duration of daylight and luminosity probably influencing the onset of bloom more than water temperature. And yet, the abundance of northern shrimp varies from one year to the next. If this synchronism is indeed responsible for inter-annual variations in the crustacean's population, how does this occur throughout the territory inhabited by the species, where deep-water temperatures vary from place to place?

The research team successfully showed that there is in fact a remarkable synchronism between the time of larval hatch and phytoplankton bloom across the northwest Atlantic, from the Gulf of Maine in the south to the Barents Sea in the north. This finding is a particularly innovative contribution. The synchronism is seen as an adaptation of the northern shrimp's reproductive cycle to the local water temperatures, so that mating

time, egg laying and incubation generally correspond to phytoplankton bloom in a given region.

The researchers also found that the duration of phytoplankton bloom had a positive influence on larval survival, but that water temperatures also affected the survival and growth rate of juvenile shrimp.

These research efforts show that northern shrimp have been able to adapt over time to the oceanographic conditions in which they exist. Will the anticipated era of climate change force northern shrimp to adapt once again?



. GOSSELIN

HARBOUR AUTHORITIES THE GASPÉ MINI-FORUM

On September 14 and 15, 2011, the last instalment in a short series of mini-forums bringing together harbour authority representatives was held in Gaspé. After the mini-forums in Sept-Îles and Matane last winter, the time had come to host a mini-forum for the harbour authorities from the Magdalen Islands and the southern portion of the Gaspé Peninsula.

A variety of topics were addressed during the mini-forum. Among other things, there was a presentation providing an interesting portrait of the Quebec fisheries industry, complete with figures, graphs and tables.

One subject in particular garnered the interest of participants, namely, the projects carried out by Fisheries and Oceans Canada in the last few years, particularly those which stemmed from Canada's Economic Action Plan.

The Department's initiative in organizing these mini-forums was appreciated by all since the mini-forums give harbour authority representatives the opportunity to discuss issues of import. The format of these meetings is also popular since the smaller number of participants is conducive to more constructive dialogue.

As the Gaspé mini-forum wound down, participants were already looking forward to the next one!

RECOGNITION AWARDS

FOR HARBOUR AUTHORITIES IN QUEBEC

On October 19, 2011, regional awards were presented in the context of the Harbour Authority Recognition Program for the fourth consecutive year. The ceremony took place in Québec City, and members of the Regional Harbour Authority Committee as well as Fisheries and Oceans Canada representatives were in attendance.

This year, two parties received this distinction: the Pointe-Basse and Pointe-aux-Loups Harbour Authority on the Magdalen Islands, represented at the ceremony by Charles Poirier, and Marvin Buckle, of the Eastern Lower North Shore Harbour Authority.

HARBOUR AUTHORITY ACHIEVEMENT AWARD

Pointe-Basse and Pointe-aux-Loups Harbour Authority purchased a building on Department property that housed small warehouses in order to make certain modifications, including the addition of a second floor to create office space.

Among other responsibilities, the Harbour Authority took charge of the calls for bids and the contract follow-up. Various other partners were also involved in the project, notably Canada Economic Development and the Caisse populaire Desjardins de Havre-aux-Maisons.

Harbour Authority members and users are all very proud of this achievement, which will no doubt be of great use to the community and become a source of considerable income for the Harbour Authority.

This project was brought to term thanks to the leadership, commitment and initiative of the Harbour Authority.

INDIVIDUAL COMMITMENT AWARD

Marvin Buckle has always been very community-minded. He has been president of his harbour authority for more than twenty years and co-founded the Eastern Lower North Shore Harbour Authority.

Buckle paved the way for a major project to replace floating docks that had been in place for over 20 years. He took charge of this project and worked in collaboration with several partners including Canada Economic Development, Emploi Québec and Fisheries and Oceans Canada. As a result, pleasure craft operators and fish harvesters now have access to safe infrastructure.

With his unwavering perseverance, Buckle contributed to the success of the Lower North Shore Harbour Authorities Program. His dedication through the years and his concern for the well-being of those who use the harbour facilities are appreciated by his fellow citizens.

Congratulations to all award recipients!



Charles Poirier (upper) and Marvin Buckle (lower) receiving their awards and certificates from Ariane Plourde, Acting Regional Director General, and Bernard Beaudoin, Regional Small Craft Harbours Branch Director.

Lyne Beaumont Small Craft Harbours

Dispatches

INTEGRATED COASTAL AND OCEAN MANAGEMENT TIME FOR ACTION!

From June 9 to 14, 2012, the Coastal Zone Canada Association will hold the 10th biennial international Coastal Zone Canada (CZC) Conference in Rimouski, Quebec. Fisheries and Oceans Canada and the Université du Québec à Rimouski will host this major event, which brings together researchers, environmental and natural resource managers, policy advisors, decision-makers, educators, students, First Nations and other interested individuals.

Four main themes will be explored:

- Addressing risks to ocean and coastal environments: Adapting for sustainable land development
- Sharing natural spaces and resources: Tools and mechanisms
- Managing and coordinating activities and uses: Dialogue among stakeholders
- Protecting the global commons: Understanding, accepting and negotiating terms

The purpose of the Conference is to promote collaborative efforts in order to strengthen the stakeholders' ability to act. The discussions will mainly focus on measures to mitigate and adapt to climate change, the use of natural resources, the protection of marine and coastal environments, sustainable development, and the management of activities and uses. Interested parties will debate the major social, economic and environmental issues affecting ocean and coastal zones.



Time for action!

THE HARBOUR AUTHORITIES CALENDAR

The Quebec Harbour Authorities have for the first time published their very own calendar! The idea to produce a calendar was first suggested at Regional Harbour Authority Advisory Committee (RHAAC) meetings, and is now a done deal.

This first edition of the calendar has been sent to the harbour authorities and is also available at RCM headquarters, various municipalities and certain public places connected to Quebec's maritime sector. The calendar shines the spotlight on some sites as well as on volunteers working with the harbour authorities, and introduces harbour administrators to their respective communities. It not only features a variety of photos, it also provides key operational and administrative reminders regarding, for example, the production of annual reports and spill emergency kit verifications.

We hope this initiative, which has thus far been well received, will be repeated year after year. The theme may be different every year; for instance, next year's calendar might focus on the tourism aspect of harbour facilities.



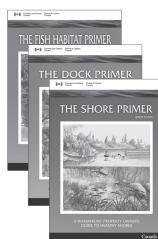
Lyne Beaumont Small Craft Harbours

New publications

GOOD PRACTICE GUIDES NOW AVAILABLE

Three guides outlining good practice for protecting fish and fish habitat-The Fish Habitat Primer, The Dock *Primer and The Shore Primer*—are now available online.

Look for these guides on our website (www.qc.dfompo.gc.ca) under Regional Publications.



NEW WEB PAGES ECOSYSTEM MANAGEMENT

Fisheries and Oceans Canada, Quebec Region has new content on its website! The newly-added web pages explore themes such as aquatic species at risk, protecting fish habitat when working near watercourses and aquatic environment protection and management.

Check it out and discover a wealth of information on the latest developments in these areas of interest in Quebec.

You can find the information at www.qc.dfo-mpo.gc.ca under the sections *Species at* risk, Fish habitat and Estuary and Gulf of St. Lawrence.

NEW EDITION OF SAILING DIRECTIONS

ATL 110 ST. LAWRENCE RIVER, CAP WHITTLE / CAP GASPÉ TO LES ESCOUMINS AND ANTICOSTI ISLAND

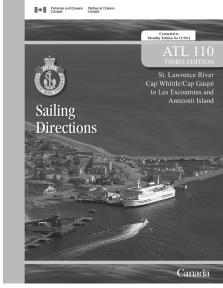
As of November 25, 2011, mariners and boaters have had access to a new edition of the Sailing Directions booklet ATL 110, St. Lawrence River, Cap Whittle / Cap Gaspé to Les Escoumins and Anticosti Island (3rd edition).

This booklet is now produced using a new printing-on-demand process, which means that the corrections published in previous Notices to Mariners are incorporated in the text. Thus, the users may obtain a corrected version. The date of the latest edition of Notices to Mariners applied is shown through a window on the cover of the publication.

Sailing Directions describe the waterways by incorporating pictures, diagrams of

fishing harbours and marinas, as well as providing general information on commercial ports, fishing harbours and marinas.

The new ATL is available for \$10.95 at all Canadian Hydrographic Service authorized dealers.



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 offenders. 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
Réjean Arsenault New Richmond	Harvesting softshell clams in a closed area and possessing softshell clams under the legal size of 51 mm. \$600
Arthur Chapados Saint-Godefroi	Fishing for mackerel without a valid licence. \$1,000
lan Chouinard Sainte-Flavie Jean-François Samuel Petit-Cap	Failing to comply with licence conditions by not immediately returning to the water all Atlantic halibut under 85 cm. \$250 + confiscation of seized Atlantic halibut (I. C.) \$2,000 + confiscation of nine seized Atlantic halibut (JF. S.)
Bertrand Daraîche Percé	Possessing eight lobster under the legal size. \$1,500 + confiscation of seized lobster
Bertrand Desbois Sainte-Thérèse-de-Gaspé	Permitting another person, not named in the licence, to fish. \$500
Roberto Desbois Saint-Ulric	Failing to land and weigh entire catch under the supervision of a dockside observer. \$750 + confiscation of seized shrimp Failing to comply with licence conditions by not completing the logbook and by fishing for a fish species without authorization. \$500
Alain Deschênes Trois-Pistoles	Harvesting molluscs in a closed area. \$300
Stéphan Emond Portneuf-sur-Mer	Possessing whelks under 70 mm. \$600
Pierre-Paul Gagnon Forestville	Failing to comply with licence conditions by not wearing a security vest while commercially harvesting softshell clams. \$200
Luc Haché Caraquet, New Brunswick	Providing false information in logbooks and daily reports. \$4,000
Pierre Haché Caraquet, New Brunswick	Fishing turbot without a licence \$196,000 + confiscation of seized fish for \$32,901
Dave Henri Huard Chandler	Fishing for herring without valid conditions. \$250
Jocelyn Jalbert Rivière-au-Renard	Failing to comply with shrimp fishing licence conditions by using a trawl without a Nordmore grate. \$3,000 + confiscation of all groundfish and shrimp from the fishing trip and the illegal part of the fishing gear
Irvin Jones Grande-Rivière	Possessing an Atlantic halibut under the legal size. Failing to comply with licence conditions by landing fish without a dockside observer present. Possessing fish processed to the point where it is difficult to determine their size. \$6,250
Gilles Legresley Newport	Failing to land and weigh entire snow crab catch. \$2,000
Alain Paul Thériault Grande-Anse, New Brunswick	Operating a fishing vessel without a designation and exceeding the daily quota for herring. \$1,445
Jean Savage Petit-Cap	Failing to land and weigh entire fish catch under the supervision of a dockside observer. Possessing fish processed to the point where it is difficult to determine their size. \$6,000 + confiscation of seized fish

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