

FISHERIES AND AQUACULTURE

NEWS

CONTENTS

Travelling photo show
Loups-mariniers, Natisiniartiit, Sealers

UNESCO Chair on integrated
analysis of marine systems

2

Overview of MAPAQ
interventions in the
commercial fisheries
and aquaculture sector
in 2013-2014
by the numbers

3

Huge boost for the
conservation of Québec's
maritime fisheries
heritage

4

Summer's end will soon be here and for several fisheries the season is well underway; in some cases, it's even already finished. The trend so far this season suggests the overall value of landings will increase by 11 percent despite a 1-percent drop in volume compared to this time last year. Although data are not yet final, we can say that the situation for several fleets has improved since 2013. This is good news for the industry!

In other news, the American Fisheries Society held its 144th annual meeting in Québec City a few days ago. We'd like to draw attention to our industry's participation in this international scientific gathering that drew more than 2,000 participants. Indeed, actors from Québec's fisheries sector took the opportunity to organise a symposium where they presented the results of a range of research and development activities, taking as their inspiration the theme *Research and innovation for*

sustainable fisheries in the St. Lawrence. We would like to congratulate them for this initiative, which served to showcase the critical work accomplished in Québec in this field.

After the end of the fishing season, we will all be invited to participate in various activities and meetings. For instance, this fall we intend to invite our commercial fisheries and aquaculture partners to a meeting where we will take stock of achievements associated with the 2013-2018 commercial fisheries and aquaculture action plan and together establish our priorities for the coming year.

Québec will also be taking part in the upcoming meeting of the Atlantic Council of Fisheries and Aquaculture Ministers (ACFAM), slated to be held in Prince Edward Island on October 15 and 16. The agenda features a number of topics, including falling lobster prices. This issue will be discussed with representatives from the other provinces and the federal government.

In closing, we wish all of you an excellent end to your season!



Pierre Paradis
Minister of Agriculture,
Fisheries and Food



Germain Chevarie,
MNA for Îles-de-la-Madeleine
and parliamentary assistant to
the Minister of Agriculture, Fisheries
and Food

THE PARTNERSHIP SEED FUND: A NEW FORM OF COOPERATION BETWEEN UQAR AND MERINOV

By Julie Boyer,

Gaspé Peninsula Regional Directorate

The Université du Québec à Rimouski (UQAR) has long been one of the Ministry of Agriculture, Fisheries and Food's main partners in the area of scientific research and economic development associated with the fisheries and aquaculture sector. Numerous reputed researchers, skilled in such areas as management, economics, finance, oceanography, biology, chemistry, and engineering, are dedicated to the advancement of what is known as the marine resource, science and technology niche.

In 2010, when the Ministry mandated Merinov to conduct its research & development and technology transfer activities, it counted on maintaining its well-established

cooperation with UQAR. The new form of cooperation proposed now by the university will help spawn more projects involving Merinov experts on the Gaspé Peninsula, Magdalen Islands, and the North Shore and UQAR researchers in the Lower St. Lawrence. The new partnership seed fund (*Fonds d'amorçage de partenariat - FAP*), fosters the establishment of partnerships between UQAR researchers and Merinov specialists by providing financial support – together with other partners – for research work and development projects of use to the aquaculture and fisheries sector. By encouraging cooperation between Merinov and the university, FAP makes it easier to finance innovative projects in Québec's regions given the multidisciplinary expertise of the project team and because universities have access to more financial support programs.

The Université du Québec à Rimouski is responsible for the administration of FAP, which was created with financial support from MAPAQ and a contribution on the part of UQAR. As of today, FAP has backed some fifteen projects, most of which are currently underway:

- Brainstorming workshop and prefeasibility analysis of a new raft-based mussel farming strategy to eliminate predation by ducks;
- Lobster enhancement follow-up using Carbon 13 marking;
- Mapping and calculation of kelp volumes in kelp beds;
- Sustainable development of shellfish farming in open water on the Magdalen Islands: Production potential and interaction with the commercial fishery;
- Study of the aquaculture potential of various freshwater finfish species;
- Use of macroalgae as biofilters in commercial aquaria;
- 2014 mariculture technology transfer workshop;
- Technical, economic and regulatory guides for fish harvesters seeking to farm scallops or mussels;
- Capacity of Magdalen Islands mariculture production to adapt to climate change;
- Trial of a new live scallop shipment system;
- Valorisation of active compounds extracted from snow crab and microalgae in the reduction of bacterial biofilms in the food and sanitation sectors;
- Synergy between macroalgae and omega-3s;
- Evaluation of the antihypertensive activity of marine extracts;
- Valorisation de active compounds extracted from commercially interesting macroalgae for use in the food and natural health product sectors.

For more information about any of these projects, please call Guillaume Werstink at 418-723-1986, ext. 1688, or e-mail him at guillaume_werstink@uqar.ca.

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FISHERIES AND AQUACULTURE NEWS

TRAVELLING PHOTO SHOW *LOUPS-MARINIERS, NATISINIARTIIT, SEALERS*

By Karine Villemaire,
Magdalen Islands Regional Directorate

The official opening of the show *Loups-mariniers, Natisiniartiit, Sealers* was held on July 2, 2014 at Exploramer in Sainte-Anne-des-Monts on the Gaspé Peninsula. Launched and supported by the Fondation Willie Déraspe (Magdalen Islands seal interpretation centre) and created in cooperation with Raoul Jomphe, the travelling exhibition showcases the people and communities with an interest in the seal industry.

To emphasise the importance of seal, and counter criticism by international organisations, the show gives the floor to three communities, each of which has its own language and is located a different area. Communities in Newfoundland and Labrador, in Nunavut and on the Magdalen Islands took part in this project situating humans within their environment. Organised as a circular

module, the information is presented in the form of a photo show, enriched by video clips.

Over the next two years, the show will travel, with stops at the following venues:

- **Exploramer, in Sainte-Anne-des-Monts**, on the Gaspé Peninsula, summer 2014;
- **Musée Shaputuan, in Sept-Îles**, on the North Shore, in fall 2014;
- **Nunatta Sunakkutaangit Museum, in Iqaluit**, Nunavut, in spring 2015;
- **CTMA Vacancier, vessel providing shuttle service between Montréal, Québec City and the Magdalen Islands**, in June 2015;
- **Interpretation Centre, in Fleur de Lys**, Newfoundland and Labrador, in fall 2015.



Photo: Steve Verreault

At the show opening at Exploramer, from left to right: Raoul Jomphe, Photographer; Sandra Gauthier, Director, Exploramer; and Robert St-Onge, Director, Fondation Willie-Déraspe (seal interpretation centre).

The seal hunt – the hunt itself and the related processing activities – is still fully justified, not only because of the traditions it represents but also in terms of the development prospects it offers. In the maritime strategy introduced recently by the Government of Québec, the seal hunt is defined as a sustainable activity... an activity that ensures the survival of the marine resource and contributes to the economic development of Québec's maritime communities. It further mentions that this industry must be taken into consideration because of the marine product development potential it represents. The strategy thus recognises the potential of products derived from seal (meat, fur, oil).

The producer of this travelling show, Raoul Jomphe, also produced *Phoques le film* and is the creator of the photo

show *Phoque la controverse*. Since it came out in 2007, Jomphe's film has become a powerful tool to counter the disinformation surrounding the seal industry. It continues to be used today to raise public awareness and inform people about the realities of the seal industry. It is hoped that the show, *Loups-mariniers, Natisiniartiit, Sealers*, will also become valuable and essential instrument for change!

It is important to point out that the Ministry of Agriculture, Fisheries and Food provided financial support for this initiative via its *Financial support program for collective initiatives in the commercial fisheries and aquaculture sector*.

UNESCO CHAIR ON INTEGRATED ANALYSIS OF MARINE SYSTEMS

By Julie Boyer,
Gaspé Peninsula Regional Directorate

Climate change, shrinking biodiversity, and the overexploitation of fisheries resources have come to threaten the health and integrity of marine ecosystems over the course of the last few decades. The repercussions of these disturbances are complex. The integrated analysis of marine ecosystems is a valuable tool that allows us to better understand the dynamics of marine populations and study responses to such threats.

The Université du Québec à Rimouski (UQAR) and the Institut des sciences de la mer obtained Canada's first UNESCO chair in the maritime field in 2010. Through its education and research activities, the *UNESCO Chair on integrated analysis of marine systems* seeks to improve understanding of marine ecosystems, foster the protection and conservation of marine biological

diversity and support the authorities and organisations responsible for coastal and ocean marine environments. It is important to point out that the Chair builds on close north-south cooperation with countries in West Africa.

According to Chairholder Dr. Jean-Claude Brêthes, the chair's activities focus primarily on the establishment of marine protected areas in Québec and Africa. The Chair has worked to define areas of interest for conservation. It provided scientific support to the marine protected area technical committee arising from the St. Lawrence action plan, and coordinated a study on the establishment of an area of this type in Magdalen Islands waters.

Biodiversity research was conducted under the auspices of the Canadian Capture Fisheries Research Network, whose members include four Canadian universities and the Department of Fisheries and Oceans Canada (DFO). These studies served to identify the

repercussions of trawling on the benthos of the Gulf of St. Lawrence, a key element leading to ecocertification of the shrimp fishery. The Chair also studied interactions between seals and fisheries in the Gulf of St. Lawrence. Working with Merinov and the Maurice Lamontagne Institute, it examined the feasibility of a new red sand shrimp fishery along the north shore of the Gulf of St. Lawrence. Moreover, the Chair studies the impact of climate change on benthic fish and invertebrate communities. Finally, an on-line course and library are being prepared in cooperation with the *UNESCO Chair on integrated management and sustainable development of the west coast of Africa* (Senegal) and the Fondation internationale du Banc d'Arguin.

It is also important to point out that partnerships with private sector organisations and with fish harvesters' associations have intensified; examples include the adoption of sustainable fishing and the contribution of fish

harvesters to the advancement of scientific knowledge.

UQAR, the Ministry of Agriculture, Fisheries and Food, the Ministry of Sustainable Development, Environment and the Fight against Climate Change, Fisheries and Oceans Canada, the regional conferences of elected officials for the Bas-Saint-Laurent and Gaspésie – Îles-de-la-Madeleine administrative regions and the Metro grocery chain have all helped fund the Chair. A number of other partners have also provided funding for Chair research.

For more information on the activities of the *UNESCO Chair on integrated analysis of marine systems*, please call:

Dr. Jean-Claude Brêthes
at 418-723-1986, ext. 1779, or e-mail him at jean-claude_brethes@uqar.ca. The Chair's website is available at <http://www.uqar.ca/systemes-marins/>.

FISHERIES AND AQUACULTURE NEWS

OVERVIEW OF MAPAQ INTERVENTIONS IN THE COMMERCIAL FISHERIES AND AQUACULTURE SECTOR IN 2013-2014 BY THE NUMBERS

By Michelle Parent,
Gaspé Peninsula Regional Directorate

Fishing fleet

332 Interventions Financial aid **\$1.8 M** **51** Interventions Loan guarantees **\$16.8 M**

Processing, aquaculture and biomass valorisation

74 Projects Financial aid **\$5.7 M** Investments **\$12.4 M**

Collective initiatives

18 Projects Financial aid **\$691,000** Investments **\$2.1 M**

Research & development

Financial aid **\$4.7 M** Investments **\$15.8 M**

Implementation of new research & development projects to support innovation in the commercial fisheries and aquaculture sector.

Jobs

94 jobs created

1 063 jobs consolidated

TYPICAL 2013-2014 INTERVENTIONS:

Regroupement des pêcheurs professionnels du sud de la Gaspésie inc.:

Evaluation of two diets to improve the survival rate of hatchery-reared American lobster larvae.

Merinov:

At-sea trials to optimise traditional bait used in the lobster fishery.

Merinov:

Project to develop a complementary red sand shrimp (sculptured shrimp) fishery on the North Shore.

Les Pêcheries Marinard ltée:

Technological upgrading of facilities and equipment used to process shrimp.

Les Fumoirs Gaspé Cured inc.:

Productivity improvement, upgrading of facilities used to produce smoked herring and deployment of a commercialisation strategy.

Les Fruits de mer Madeleine inc.:

Acquisition of equipment to develop new products.

Association des pêcheurs des Îles-de-la-Madeleine:

Ongoing effort to obtain ecocertification for Magdalen Islands lobster.

Comité sectoriel de main-d'œuvre des pêches maritimes:

Commercial fisheries and aquaculture sector labour diagnosis.

9140-1661 Québec inc. (Pisciculture Gilbert):

Work to optimise facilities and increase production system capacity.

Pisciculture Mont-Tremblant inc.:

Refurbishment of fish farming facilities to improve environmental performance.

La Poissonnerie du Havre ltée:

Acquisition of equipment used to process snow crab.

I & S Seafoods:

Addition of an off-loading pump and equipment used to process pelagic finfish.



HUGE BOOST FOR THE CONSERVATION OF QUÉBEC'S MARITIME FISHERIES HERITAGE



By Julie Boyer,

Gaspé Peninsula Regional Directorate



The *Toubib*, École supérieure des pêcheries training ship, around 1940
 (Source : Archives de la Société historique de la Côte-du-Sud).

It seems that fishing and the sea attract passionate, committed and determined people. Gaétan Myre, Alain Fréchet and Marc Millette are three retired individuals who dedicated their careers to teaching, research and management in the fishing sector. They have joined forces with Maria Aubin, anthropologist, to establish the Collectif Pêche et Patrimoine. Why? In order to study, preserve, and disseminate knowledge relating to the fisheries and the history of fishing communities, particularly those in Québec.

To this end, they have embarked on a series of fascinating projects! Notably, they've indexed the following fishery magazines for the years from 1950 to 1970: *Actualités marines*, *Le Pêcheur canadien*, *À pleines voiles* and *La Pêche au Canada*. They're working on a biography of Lucien Beaugé, a pioneer in world oceanography, who was a professor at Université Laval's École supérieure des pêcheries from 1938 to 1951, and of Louis Bérubé, who, from 1923 to 1960, played a pivotal role in the development of fishermen's coops, the expansion of processing technologies and in fisheries-related education at Sainte-Anne-de-la-Pocatière and Grande-Rivière. In the wake of these studies, the collective has also begun to write a history of the École supérieure des pêcheries in Sainte-Anne-de-la-Pocatière.

CREATION OF THE SAINTE-ANNE-DE-LA-POCATIÈRE FISHERIES COLLEGE

Who hasn't heard of the École supérieure des pêcheries, a college affiliated with Université Laval's faculty of agriculture, founded in 1938 by Louis Bérubé and François-Xavier Jean with the support of Mgr François-Xavier Ross – the first bishop of the Diocese of Gaspé – and of Onésime Gagnon, the Minister of Mines, Hunting and Fishing. The creation of this establishment addressed the urgent need to modernise the fishing industry felt at the time. The resulting strong momentum for change led to the construction of new fishing harbours, adoption of innovative techniques, use of new fishing vessels, implementation of maritime credit, advances in applied research and countless other developments. Since times were hard and the economy had not yet recovered, the college was established in Sainte-Anne-de-la-Pocatière to take advantage of facilities and services already available at the agriculture college. The institution had an economics department that was mandated to revive the coops, a measure that was considered crucial to freeing fishermen from their dependence on Channel Island companies and other similar businesses. This movement spurred the creation of numerous coops that later would join forces as members of Pêcheurs-Unis du Québec.



École supérieure des pêcheries around 1940
 (Source : Archives de la Société historique de la Côte-du-Sud).

TWO GENERATIONS OF VISIONARY GRADUATES

The École supérieure des pêcheries de La Pocatière closed its doors in 1964, although the educational program continued to be offered at Université Laval until 1967. Its impact during and after this time, however, was tremendous since two generations of visionary graduates received their educations there. As civil service managers, scientists, economists and statisticians, plant managers or teachers at universities or specialised colleges, these graduates played influential and notable roles in the evolution of the fisheries in Québec and New Brunswick.

They notably include Léonce Chenard, who for 30 years served first as a fisheries manager and then as New Brunswick's deputy minister of fisheries; Marcel Daneau, who was deputy minister of industry and commerce – fisheries branch, from 1977 to 1980, Gérard B. Martin, Université Laval professor emeritus, and Cléophas Samuel, former director of the École des pêches in Grande-Rivière, as well as several oceanographers such as Yves Jean and Roland Chevrier; the latter also taught at Grande-Rivière's École des pêches.

COLLECTIF PÊCHE ET PATRIMOINE

The Collectif Pêche et Patrimoine builds on the archives maintained by the Société historique de la Côte-du-Sud, the Université du Québec à Rimouski and Université Laval, which all have collections pertaining to the collective's current work. It is also gathering the recollections of École supérieure des pêcheries graduates and professors and of those who worked in the fisheries sector at the time. The recordings are kept at the Musée de la mémoire vivante in Saint-Jean-Port-Joli.

By conducting this social research and publishing documents, by organising forums and meetings, by contributing to the design or production of fishing-related exhibitions and films the collective truly helps maintain our maritime fishing heritage. For more information, please visit the collective's website at <http://www.cpp-qc.org/>.