

FISHERIES AND AQUACULTURE

NEWS

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The end of summer that will soon be here is the perfect time for an initial look at the results of the fishing season. Although still preliminary, the fishing data indicate an improvement in total landings in Québec, in both volume and value, compared to last year. Lower landing prices for some species, like the snow crab, have been offset by higher catch volumes. The 2013 fishing season is satisfying compared to last year, the exception being the drop in landing prices for lobster, particularly on the Magdalen Islands.

I would like to take this opportunity to congratulate the lobster harvesters of the Magdalen Islands for their Marine

Stewardship Council (MSC) certification, which they obtained for the Area 22 lobster fishery. It is important to point out that theirs is the first inshore lobster fishery in Canada to receive MSC eco-certification. It is a significant advantage since numerous distributors have committed to buying only MSC-certified fish and seafood. This designation guarantees that a fishery meets the criteria established by the FAO—the United Nations Food and Agriculture Organisation—for the sustainable harvest of marine resources.

I am sure that in the coming months and years other fisheries in Québec will join them. Initiatives such as eco-certification and product characterisation are just two of the means supported by the Government of Québec to increase the notoriety and improve the marketing of our fish and seafood at home and elsewhere in the world.

On another note, I will have the pleasure of welcoming to Québec City my counterparts from the federal government and Canada's provinces and territories for the meetings of the Canadian Council of Fisheries and Aquaculture Ministers (CCFAM) and the Atlantic Council of Fisheries and Aquaculture Ministers (ACFAM) this coming September. These

two meetings will be ideal forums to exchange views and hold discussions on issues of common interest. I will assuredly seize the opportunity to remind the federal minister of the expectations of Québec's fisheries and aquaculture industry.

In closing, I invite you to consult the summary of the financial actions taken by the Ministry of Agriculture, Fisheries and Food during the 2012-2013 fiscal year. The table provides an overview of the financial aid granted to the commercial fisheries and aquaculture sector in Québec's regions, notably on the Gaspé Peninsula, the Magdalen Islands and the North Shore.

Enjoy your reading; I wish you an excellent season's close!

François Gendron
Deputy Premier,
Minister of Agriculture,
Fisheries and Food

A GROUP OF CHINESE BUYERS DISCOVERS THE PRODUCTS OF QUÉBEC

By Simon Mercille,

Analyses and Policies
Directorate

In the first week of June, GIMXPORT, an organisation dedicated to increasing exports by enterprises located in the Gaspésie-Îles-de-la-Madeleine administrative region, had the opportunity to introduce representatives of Chinese companies to the aquatic products of Québec. The activity was part of the "Lobster project" that the organisation has put together in cooperation with the industry. Thus, over the course of five well-filled days, the GIMXPORT guests were able to visit a dozen Gaspé Peninsula processing facilities and participate in a number of discussion sessions with the administrators of marine product plants.

Betty Chu, Administrative Director and founder of Family Care Ltd., and Simone Li, of the Import Branch at Dalian Mingchang International Trading Co., arrived in Québec's capital on June 1. Qixing Ji, General Manager of Beijing Pacific Boye Fishery Trade Co., joined

the group on the following day; he was accompanied by his executive chef, who had the opportunity to discover the products at their freshest, and an interpreter.

Before setting off for Bonaventure, the members of the Chinese delegation were first welcomed at Québec's Ministry of Agriculture, Fisheries and Food (MAPAQ) offices where they sat in on a general presentation of the province's commercial fisheries and aquaculture sector. Consequently, they were able to undertake their tour of the Gaspé Peninsula with some knowledge of the sector and a good idea of the context. They also had the chance to meet Jean-Paul Gagné, General Manager of the Association québécoise de l'industrie de la pêche and speak with him for a few moments.

The plant tours went very well and raised the interest of the Chinese buyers. The contact was good and participants understood one another despite the anticipated language-related challenges. The comments from members of the Chinese delegation and Québec



Photo: Xueyan Chen, MAPAQ

From left to right: Simone Li (Dalian Mingchang International Trading Co.), Gino Lebrasseur (Unipêche MDM), Maxime Smith (Unipêche MDM), Betty Chu (Family Care Ltd.), Jean-Marc Marcoux (Unipêche MDM) and Pascale Allain (GIMXPORT)

industrialists during the visits combined with the samples that were sent later point to interesting benefits for enterprises in the region.

For more information about the Chinese delegation's visit to the Gaspé Peninsula, check the pages of the journal Pêche Impact.

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UN
QUÉBEC
POUR TOUS

Québec

NEW FINANCIAL AID PROGRAMS

By Jean-Michel Poulin,

Analyses and Policies
Directorate

The commercial fisheries and aquaculture industry round table (*Table ronde de l'industrie des pêches et de l'aquaculture commerciales*) was held on December 18, 2012. There, the Ministry listened to what the main sector actors had to say about the issues affecting them and their priorities. The 2013-2018 Action plan: *Building our commercial fisheries and aquaculture industry* stems from this meeting.

To more closely align itself with the major priorities set out in the new action plan, the Commercial Fisheries and Aquaculture General Directorate has undertaken the task of reviewing all its intervention tools for the sector. It has notably focussed on revising three of the financial aid programs that it administers. The operation mobilised Directorate staff to seek more closely adapted means that will address our clientele's needs and help them meet the new challenges that lie ahead for them. Consultations were also conducted, during which the outcome of this effort could be presented to industry representatives.

Consequently, for the capture sector, the new framework program, *Financial support for fishing enterprises*, seeks to achieve three objectives: provide financing for Québec's fishing fleet, reduce the debt rate of fishing enterprises and mitigate the impact of variations in the gross incomes of enterprises on the payments arising from their contractual obligations.

As for the *Financial support program for the development of the commercial fisheries and aquaculture sector*, its goal is to foster the growth of enterprises in this sector in a perspective of sustainable development.

This program notably seeks to:

- Improve the profitability, diversification and versatility of enterprises operating in the marine product harvest and processing sector;
- Improve the competitiveness of marine product processing plants by optimising their infrastructure and modernising their equipment;
- Improve food safety as well as the environmental and energy performance of aquaculture and processing enterprises; and
- Step up production and diversification, and improve the profitability of aquaculture enterprises.

In terms of support for the industry's joint initiatives, the *Financial support program for collective initiatives in the commercial fisheries and aquaculture sector* aims to stimulate networking within this sector. Notably, it serves to support the defence of Québec interests at various negotiation tables and contributes to the sound operation of the sector's national associations and system tables. Finally, it offers financial support for projects that are in the collective interest, the provision of services for the industry and the implementation of any project that fosters the outreach of the commercial fisheries and aquaculture sector.

Finally, the Ministry just recently implemented a special financial aid program designed to support Québec's lobster harvesting fleet. The aid offered seeks to support the lobster harvesting industry which is experiencing hardship, notably due to low market prices in recent years.

For detailed information about these programs, interested individuals can consult the Ministry of Agriculture, Fisheries and Food website at the following address:

<http://www.mapaq.gouv.qc.ca/fr/Peche/md/Programmes/Pages/Programmes-Peche.aspx>.

List of the financial aid programs in effect for the 2013-2014 fiscal year

- Financial support program for young aspiring fishers
- Financial support program for the development of the commercial fisheries and aquaculture sector
- Financial support program for fishing enterprises (framework program)
- Financial support program for collective initiatives in the commercial fisheries and aquaculture sector
- Financial support program to improve the environmental performance of salmonid fish farming enterprises (Aquareu program)
- Innovamer program
- Financial support program for Québec lobster harvesters

LOBSTER HABITAT CREATION AND STOCK CONSERVATION: LARVA SUPPLY IN THE WILD

By Marie-Anne Thibault,

Intern at the Gaspé Peninsula
Regional Directorate

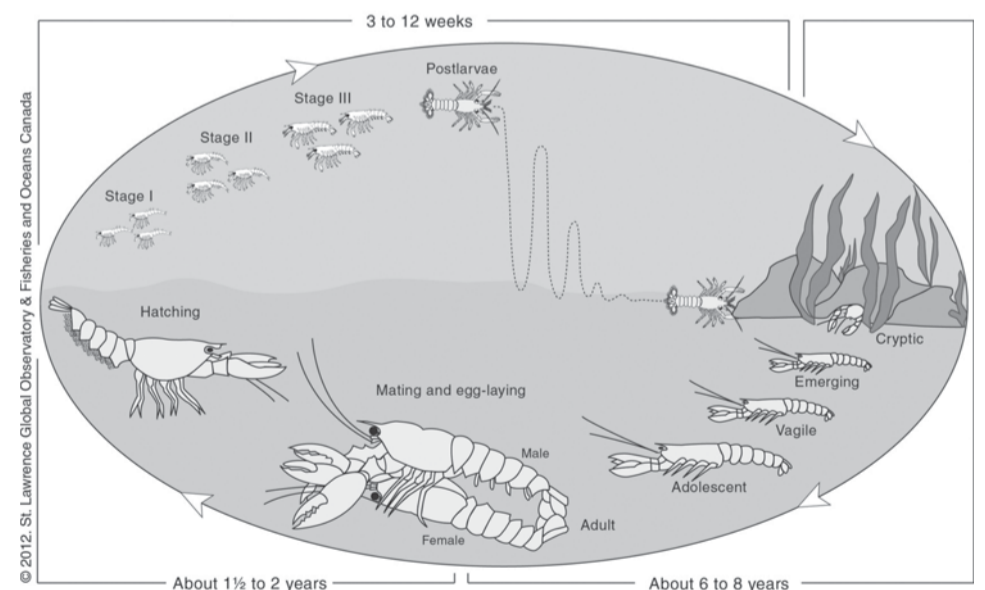
The Association des pêcheurs propriétaires des Îles-de-la-Madeleine (APPIM) is building artificial lobster reefs to expand the Baie de Plaisance nursery with an eye to conserving the stock. To boost the use of artificial reefs in areas that naturally produce lower densities of lobster, it could be interesting to introduce lobster larvae to those areas. With this in mind, APPIM explored a new innovative method to improve the larvae supply in a natural setting.

Numerous postlarvae inhabit the water column and represent an unutilised reserve, since some of them are naturally carried beyond Magdalen Island waters by currents and surface winds. The new method tested consists of a technique designed to recover a tiny fraction of this reserve. This supply method has no negative impact on lobster postlarvae stocks and does not harm the environment in any way. Obtaining larva supply in the wild in this manner could

also be an economical solution since the only expenses incurred are for the purchase of collectors and the variable costs associated with work on the water.

In 2012, APPIM joined forces with Merinov to try out the CARE (Collect by Artificial Reef Eco-friendly) collection system. CARE is a new process patented by Ecocean, a French corporation specialising in the collection and culture of marine postlarvae. Using a watertight lamp, this system generates a light spectrum that attracts the larvae. They are then caught in a net placed beneath the light source. In fact, the CARE process has proven functional and effective in the particular conditions that exist at the study sites. The average yield of the CARE device varies from 8 to 14 stage-IV lobster larvae per 48-hour period of immersion at a productive site. Nearly 100 percent of the lobster larvae collected are in good morphological condition.

Perfecting the equipment would increase the yield of the collection system in terms of catch. In fact, improvements could be made that would



allow the device to automatically harvest stage-IV postlarvae without drawing them to the net. This innovation would make it possible to lower the unit cost of the postlarvae and thus, obtain a more advantageous solution. Rearing the harvested larvae to more advanced development stages could also be considered; this would increase the survival rate at the time of seeding.

For more information, please contact Jean-François Laplante, Project Leader at Merinov, or Léonard Poirier, Manager of the Association des pêcheurs propriétaires des Îles-de-la-Madeleine.

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OVERVIEW OF MAPAQ INTERVENTIONS IN THE COMMERCIAL FISHERIES AND AQUACULTURE SECTOR IN 2012-2013

Gaspé Peninsula	North Shore
Fishing fleet	Fishing fleet
Loan sureties for 25 fishing enterprises	Loan sureties for 7 fishing enterprises
Total amount of loans guaranteed by MAPAQ:\$9,621,121	Total amount of loans guaranteed by MAPAQ:\$3,282,085
Number of young fishers who received benefits via the <i>Financial support program for young aspiring fishers</i> :9	Number of young fishers who received benefits via the <i>Financial support program for young aspiring fishers</i> :1
Total grants paid out to young aspiring fishers:\$208,000	Total grants paid out to young aspiring fishers:\$25,000
Total amount paid out via other measures:\$264,300	Total amount paid out via other measures:\$169,900
Aquaculture, processing and biomass valorisation	Aquaculture, processing and biomass valorisation
Support provided for 54 projects	Support provided for 5 projects
Grants provided:\$4,676,907	Grants provided:\$342,147
Total cost of projects:.....\$27,620,882	Total cost of projects:.....\$795,831
Research & development	Research & development
Support provided for 5 projects	Support provided for 1 project
Grants provided:\$3,947,022	Grant provided:\$20,938
Total cost of projects:.....\$4,691,396	Total cost of project:\$79,492
Job impact	Job impact
Jobs created:45	Jobs created:2
Jobs consolidated:1 155	Jobs consolidated:3
Magdalen Islands	Other regions
Fishing fleet	Aquaculture, processing and biomass valorisation
Loan sureties for 32 fishing enterprises	Support provided for 15 projects
Total amount of loans guaranteed by MAPAQ:\$7,445,878	Grants provided:\$824,530
Number of young fishers who received benefits via the <i>Financial support program for young aspiring fishers</i> :10	Total cost of projects:.....\$2,126,045
Total grants paid out to young aspiring fishers:\$250,000	Research & development
Total amount paid out via other measures:\$204,300	Support provided for 5 projects
Aquaculture, processing and biomass valorisation	Grants provided:\$599,949
Support provided for 9 projects	Total cost of projects:\$1,288
Grants provided:\$1,338,414	Job impact
Total cost of projects:.....\$4,466,152	Jobs consolidated:50
Research & development	
Support provided for 2 projects	
Grants provided:\$50,613	
Total cost of projects:.....\$170,228	
Job impact	
Jobs created:3	
Jobs consolidated:539	

Some interventions in 2012-2013

Unipêche M.D.M. Ltée: Technological modernisation of the facilities and equipment used to process snow crab, lobster and other marine products.

Poissonnerie de Cloridorme inc.: Experimental, pilot and commercial processing of sea cucumber and development of new products.

La Crevette du Nord Atlantique inc. and Les Pêcheries Marinard Ltée: Modernisation of shrimp processing facilities to improve the profitability of activities and valorise shrimp residue in order to produce food-grade meal.

Cusimer (1991) inc.: Diversification of processing activities to add frozen mackerel fillets for the table market.

9016-9608 Québec inc. (Allen Cotton): Acquisition of twin trawls for the firm's fishing vessel to reduce operating costs.

Regroupement des pêcheurs professionnels du sud de la Gaspésie inc.: Deployment of a marketing strategy to diversify export markets for lobster.

Association québécoise de l'industrie de la pêche: Renewal of the Marine Stewardship Council certification for the northern shrimp fishery in the Gulf of St. Lawrence.

Merinov: Reduction in the fuel consumption of a fishing vessel by using wind energy.

Cap sur Mer inc.: Equipment modernisation and reorganisation of marine product processing activities.

La Moule du Large inc.: Expansion of the enterprise, and blue mussel processing in open water on the Magdalen Islands.

Les Fruits de mer Madeleine inc.: Acquisition of equipment to extract rock crab meat.

Association des chasseurs de phoques des Îles-de-la-Madeleine: Ongoing implementation of a communication strategy dealing with the importance of the seal hunt.

Merinov: Comparison work on sea scallop muscle refinement during the final two years of culture.

Les Crabiers du Nord inc.: Ongoing work to connect a potable water well begun in 2012 in follow-up to the optimisation and modernisation of processing equipment. The ultimate goal of these undertakings is to obtain a permanent and guaranteed supply of water and enable the enterprise to pursue its activities and development.

Pêcheries J.P. Élément inc.: Experimental sea cucumber fishery.

Merinov: Definition of a new method to optimise brown alga seeding density for aquaculture activities on the Lower North Shore.

Ferme piscicole des Bobines: Development of outdoor rearing tanks in greenhouses to improve the enterprise's productivity.

Groupe alimentaire nordique inc.: Plant upgrading to obtain *Safe Quality Food* certification and thus, reduce food safety-related risk to an acceptable threshold.

9008-5853 Québec inc. (Aquaculture Blainville), Pisciculture Alain Sauvé and Pisciculture Ferme-Neuve: Redesign of fish farming facilities to improve the environmental performance of the enterprises within the context of the *Stratégie de développement durable de l'aquaculture en eau douce au Québec*.

Association québécoise de l'industrie de la pêche: Ongoing generic campaign to promote Québec's aquatic products on the domestic market.

Association des pêcheurs commerciaux du lac Saint-Pierre: Scientific spring fishing to characterise the perch stock in Lac Saint-Pierre.

Institut des nutraceutiques et des aliments fonctionnels: Studies of the cardio-metabolic, muscle repair, antimicrobial and antioxidant properties of food proteins extracted from northern shrimp coproducts.

FISHERIES AND AQUACULTURE NEWS

STUDY ON THE INNOVATIVE CAPACITY OF MARINE PRODUCT PROCESSORS

By Julie Boyer,

Gaspé Peninsula Regional
Directorate

Globalisation exerts significant pressure on the seafood processing industry. It is, therefore, of paramount importance for this industry to maintain its competitiveness; one solution lies in the manufacture of food products or value-added co-products and derivatives for different markets. However, this avenue calls for a clear understanding of the key elements of innovation.

The Association québécoise de l'industrie de la pêche (AQIP) and the Institut de recherche sur les petites et moyennes entreprises (INRPME), a body affiliated with the Université du Québec à Trois-Rivières, agreed to conduct a study on reinforcing the capacity for innovation of seafood processors (*Renforcement des capacités d'innovation des transformateurs de produits de la mer*) to identify potential areas for intervention that would ultimately help optimise innovation in the food processing sector. It is important to point out that the Ministry of Agriculture, Fisheries and Food provided financial support for this study.

An institute that conducts research on small- and medium-size enterprises, INRPME is recognised as one of the world's most important research institutes on SMEs. It proceeded to conduct a detailed analysis of six Québec food processing enterprises based in four regions of Québec located in the maritime regions and elsewhere. Over the course of the last year, the managers of these SMEs were invited to take part in interviews and to complete questionnaires about such aspects of their activities as innovation in practice, the product development process, risk management and the value chain. The Institut then made a set of recommendations and proposed a series of potential actions, tools that can be used by the industry, support and development organisations and the Ministry of Agriculture, Fisheries and Food.

First observation: SMEs are effective in primary processing and product innovation

The six SMEs that took part in the study are innovative enterprises. Not only do they meet the needs of a local clientele, their primary processing products are recognised for their quality throughout the world. At most of the enterprises, the Institute noticed a solid strategic commitment to innovation, notably to better address the needs of their esta-



Photo: Eric Labonté, MAPAQ

blished clientele. It also observed a strong sense of initiative in managers and considerable willingness to work with other actors.

In fact, these SMEs make exemplary use of the resources within their environment and for this reason, stand ahead of the average Québec SME. They also show themselves to be more effective in terms of process innovation and are notable for their use of automated production chains and their capacity to deliver products of excellent quality.

Second observation: Improvement needed to foster product innovation

Product innovation is a highly demanding process. In this regard, INRPME drew attention to improvements that need to be made within enterprises. For instance, to develop products resulting from third-stage processing, deficiencies need to be overcome not only in business practices but also in financing, equipment and technology.

With respect to business practices, there are several improvements that would likely increase business performance in the area of innovation. Companies must develop new skills to better understand the needs of different customers, become familiar with the actions of their competitors, manage marketing better, build a distribution network suitable for processed products and, finally, find and retain qualified staff. The Institute also suggests setting up mechanisms that

would allow enterprises to recognise and retain the staff that are most committed to innovation, train senior staff in the management of innovation and finally, formalise and structure the product development process.

In addition, INRPME observed deficiencies relating to financial resources, equipment and technology for innovation and in terms of computer applications used in production. The uncertainty faced by managers contemplating third-stage processing makes them vulnerable when it comes to obtaining appropriate and sufficient funding to increase their production capacity and hire specialised staff.

As a way to create greater synergy between companies, the Institute suggests they take action together and pool their resources, particularly in their dealings with support agencies. It seems useful and advantageous to enrich existing organisations such as Merinov by equipping them with the tools needed to develop products, but also by assigning more skilled staff to those agencies. All enterprises should increase their knowledge in the areas of marketing, commercialisation, intelligence and logistics. If a resource person with all these skills were available to all companies, this would ultimately promote cooperation and stimulate the discovery of potential sources of innovation.

The importance of a stable supply and less fluctuation early in the season is

also crucial to make planning easier at enterprises that are already struggling financially and in terms of human resources. Indeed, these factors affect the performance capacity of the enterprises' production structure, which is sometimes underutilised and often subject to the vagaries of production stoppages due to the absence of raw material. It might also be possible to extend the duration of activities, which would have a positive impact on staff retention.

In conclusion

As in the past, the solution for successfully moving ahead with further processing will likely be found in the synergy that exists between resource organisations and SMEs. To innovate on an ongoing basis, all actors must join forces and take action to remedy the deficiencies identified in the INRPME study.

For sector enterprises, innovation can become a distinctive element and a source of pride. Innovation can play a role in creating a brand and instilling a more creative culture where success fosters industry renewal, pushes back regional boundaries and mobilises a labour force willing to make these successes their own.

For more information on the INRPME study, please contact the AQIP's Jean-Paul Gagné at 418-654-1831.

