

Réseau canadien d'aquaculture multitrophique intégrée du CRSNG



The Global Aquaculture Advocate just published the second part of a paper by Thierry Chopin entitled "Seaweed aquaculture provides diversified products, key ecosystem functions. Part II. Recent evolution of seaweed industry".

In Part II, Thierry Chopin explains that the seaweed industry is in full mutation. Used, during the 20<sup>th</sup> century, mostly for the extraction of phycocolloids, seaweeds remain a relatively untapped resource with a huge potential as edible food, food ingredients, cosmetics, agrichemicals, fishmeal, biomaterials and bioenergy molecules. Since they are also significant transitory nutrient and carbon sinks for this planet, seaweeds should also be the objects of trading credits for the ecosystem services they render. However, some biotechnological issues and societal constrains remain to be addressed. A long-term responsible and gradual interdisciplinary implementation strategy, based on aquanomy principles, needs to be developed if we want the Turquoise Revolution to succeed.

Part I, published in the previous issue of the Global Aquaculture Advocate, was a kind of "Introduction to Seaweeds", in which Thierry Chopin explained what seaweeds do, their importance in aquaculture, and clarified what seaweeds are, or are not, in simple terms for non-phycologists (phycologists are the people studying algae).

Read the article: http://www.unbsj.ca/sase/biology/chopinlab/articles/files/2012.07.Chopin%202012%20 GAA%20Seaweeds%20Part%202.pdf

Loblaw Companies Ltd. on track to meet sustainability goals. Canada's largest retailer is closing in on its pledge to source 100 percent of its seafood from sustainable sources by the end of 2013. Among the progress cited, the company mentions its expansion of the availability of WiseSource<sup>TM</sup> Salmon (*i.e.* IMTA salmon) in Ontario and Québec stores and its introduction throughout Atlantic Canada.

Read the article: <a href="http://www.seafoodsource.com/newsarticledetail.aspx?id=16493">http://www.seafoodsource.com/newsarticledetail.aspx?id=16493</a>



Sarah McConnachie was awarded the "Best Poster Presentation" at Aquaculture Canada 2012, the annual meeting of the Aquaculture Association of Canada held in Charlottetown, Prince Edward Island, May 27-30, 2012. Sarah is a PhD student with Dr. David Speare, from the Atlantic Veterinary College (AVC) at the University of Prince Edward Island (UPEI). Her poster was entitled "Retention of viable *Loma salmonae* spores within the blue mussel (*Mytilus edulis*): probing pathogen transfer within an integrated multi-trophic aquaculture setting using a laboratory model" and was co-authored with Nicole Guselle and David Speare.

Congratulations to the members of the D1P5 project of CIMTAN!



Réseau canadien d'aquaculture multitrophique intégrée du CRSNG



# CIMTAN just held its third Annual Meeting, June 19-22, in Charlottetown, PEI.

On June 19, the Scientific Committee had its annual face-to-face meeting to review the progress of the 14 CIMTAN projects distributed among its 3 domains and make recommendations to the Steering Committee. The latter also met face-to-face, on June 22, to review the recommendations and assess the progress of the Network and its readiness for the mid-term review scheduled this fall. It was interesting to note that a significant number of the members of both the Scientific and Steering Committees also attended the Annual General Meeting (AGM), on June 20-21, which attests to their keen interest in the progress made by the Network.





## Réseau canadien d'aquaculture multitrophique intégrée du CRSNG



The AGM was attended by 48 people (22 of them being HQPs (Highly Qualified Personnel), i.e.

Master and PhD students, postdoctoral fellows and technicians). During the AGM, representatives of the 14 projects made 23 presentations, 18 of them given by **CIMTAN HQPs. Being** at the midway point of the Network, **CIMTAN** scientists have already trained 72 (63 %) of the 114 HQPs planned for the full duration of the Network.

After a full day of presentations and discussions, the evening of June 20, was spent networking at a relaxed, pleasant and beautiful spot that only Prince Edward



Island knows how to offer. It was the "Annual Banquet at the Beach"! The Delta Prince Edward transported all participants to the North Shore, near Cavendish. In fact, it was just a few hundred meters away from the Lucy Maud Montgomery Museum and the young Maud may well have found some of her inspiration for writing her world-renowned series of novels, including *Anne of Green Gables*, at the very same beach.

Some pictures of the evening are provided here, but you really needed to be there to enjoy the excellent meal and very special atmosphere conducive to excellent exchanges, discussions and fun. From the comments of all attendees, this was a unique networking opportunity!



# Réseau canadien d'aquaculture multitrophique intégrée du CRSNG



Manav Sawhney came to CIMTAN as Network Manager, at its very beginning in March 2009. He had been managing an ACOA-AIF IMTA project on the east coast since 2006. Manav's background, working with seaweeds in an IMTA setting, had enabled him to tackle the technical and scientific requirements that the project/network demanded. However, the management, financial, administrative and policy-based needs were something that he learned, rather rapidly, on the job. The transition to Network Manager of CIMTAN came with its own series of challenges. The financial aspect and budgets were perhaps the easiest to deal with, as he had helped develop them during the formation stages of CIMTAN. However, working with research services on the many drafts of the Network Agreement, trying to



liaise with all the Network partners, students and researchers, organizing meetings, synthesizing reports, and keeping everybody in line was challenging work. Building on the management experience he has gained through CIMTAN, Manav is moving to Ann Arbor, Michigan, where he will work towards an MBA at the Ross School of Business, University of Michigan. His focus there will expand on his work with IMTA and work towards sustainability and resource utilization in enterprises, focusing on green operations and sustainable enterprise development. He wishes his replacement, Adrian Hamer, and all of CIMTAN, great success for the remainder of the Network and beyond.

**CIMTAN member quote of the month:** "Working with CIMTAN has been a truly enriching experience, where I have realized that a Network is more than a sum of its parts. It becomes almost an organic entity and must be nurtured to take a life of its own. It has been a ride being at the helm of it all!" (*Manav Sawhney, CIMTAN Network Manager*).



## Réseau canadien d'aquaculture multitrophique intégrée du CRSNG





since it meant more journeys to scenic Fair Harbour.

Eric Hoevenaars recently completed his MASc degree at the University of Victoria where he researched and developed various modeling techniques for sizing renewable power systems. His contribution to CIMTAN was at the IMTA site of Kyuquot SEAfoods Ltd. on Vancouver Island, where he attempted to supplement the environmental benefits of IMTA with clean power to reduce greenhouse gas emissions. He evaluated the wind and solar resources and performed a study to propose a system designed to provide clean, reliable, and cost-effective power to on-site electric winches. You can see the result of some of his work in the form of a 14 m meteorological tower on the cage system, recording wind speeds, direction, and temperature. While installing this tower, he learned all about the complications related to working in a harsh marine environment, including rust and non-rigid floating docks. Though it took a few trips to ensure the tower was built to last, Eric was not all that upset

**Second CIMTAN member quote of the month:** "It is inspiring to be a part of a network of researchers promoting not only the environmental benefits intrinsic to the IMTA process but also the value of clean power." *(Eric Hoevenaars, CIMTAN MASc).* 



## Réseau canadien d'aquaculture multitrophique intégrée du CRSNG

# **CIMTAN** Snippets

Emily Nelson joined CIMTAN in the summer of 2009, as an undergraduate honours student from the University of New Brunswick in Saint John (UNBSJ) looking at the potential of the sea cucumber (Cucumaria *frondosa*) as an east coast IMTA organic extractive species. She is continuing this work in her MSc thesis through UNBSJ, supervised by Drs. Bruce MacDonald and Shawn Robinson. Her work focuses on two main points: determining if sea cucumbers can consume aquaculture waste both in the field and the laboratory, as well as



quantifying the efficiency at which sea cucumbers can absorb organic material from their food (absorption efficiency). She can most likely be found hanging a cage of sea cucumbers out in the Bay of Fundy or up to her elbows in seawater sampling in the laboratory. Emily is currently finishing up her thesis and is expected to graduate in the fall of 2012. Some of her results are already submitted to the journal *Aquaculture*.

**Third CIMTAN member quote of the month:** "I love being part of a network that not only allows me to discuss my findings with fellow biologists, but also gives me an opportunity to interact with those looking at the social and economic implications of IMTA. I've definitely become more aware of the impact I can have on my environment and the responsibility I have to be a good steward of these resources." (*Emily Nelson, CIMTAN MSc candidate*).