

Aquaculture

North America

Fish Farming in the United States, Canada & Mexico

INTEGRATED MULTI-TROPHIC AQUACULTURE

IMTA message recreated in dance



Earlier this fall a dance interpretation of Integrated Multi-Trophic Aquaculture hit the stage at the Imperial Theatre in Saint John, New Brunswick. Blue mussels and kelp are represented in the scene depicted above.

BY KATHY KAUFELD

A Canadian marine biology professor has turned to the arts to spread the word about aquaculture's role in meeting future seafood demand.

Dr. Thierry Chopin, a leading expert in Integrated Multi-Trophic Aquaculture (IMTA), worked with Ontario-based Motus O Dance Theatre to turn his research project into a dance.

"I want the message (about the importance of aquaculture) to go outside of the scientific world because I think if we want to be relevant to society, we have to convey the message to society," said Chopin, who teaches at the University of New Brunswick in Saint John, New Brunswick. "If I want to address the general public, I have to find other ways... Why not a dance piece? Sometimes approaching things in a surprising way does the trick. It's quite powerful that way."

On October 14, a dance interpretation of Chopin's aquaculture research project hit the stage at the Imperial Theatre in Saint John as part of a show called *Perspectives*. A collage of short contemporary dances, *Perspectives*

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FISH HEALTH

ISA allegation creates angst for BC salmon sector

Verification tests underway

Last month it was announced that a strain of the Infectious Salmon Anemia (ISA) virus that had devastated stocks in wild sockeye salmon smolts from British Columbia's River's Inlet.

And it was emphasized at a press conference called by anti-salmon farm activist Alexandra Morton and her associate Dr David Routledge of Simon Fraser University, that the virus had been identified as being a European strain, likely originating from a salmon farm in the province.

It was the first time, despite close to 5000 tests, that the ISA virus had been found in BC salmon or anywhere else in the Pacific Northwest; and the shock value was fully enhanced by numerous headlines across not just North America but the entire globe about a "deadly" or "lethal" virus having been found in BC salmon.

That kind of statement, said an east-coast scientist intimately involved in the testing of the fish, blew his findings and the situation "out of proportion".

"It's nothing really to change the industry," virologist Dr. Fred Kibenge said in one media report in the Seattle area. "It's very unfortunate that people are spinning it this way. It's really dangerous when you put it that way."

In various parts of the United States, a number of groups, politicians, scientists and high-profile commentators instantly went into action mode, calling for drastic measures to be taken as quickly as possible against the BC salmon-farming industry.

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PROFILE: AQUACOPIA CAPITAL MANAGEMENT LLC

New York-based venture capital firm specializes in aquaculture investments

BY ERICH LUENING

NEW YORK – One of the most essential efforts for any business is finding financial backing, whether it's in the computer tech, green, or aquaculture sectors.

For the fish farming sector the venture capital firm Aquacopia Capital Management LLC is one of the only investment houses of its kind focusing strictly on the aquaculture industry.

Located in Manhattan, Aquacopia co-founder and managing director David Tze wants to find the next best aquaculture shop, technology or alternative feed source to invest in, whether a startup or an already commercial outfit looking to change or expand.



Above: One of Aquacopia's aquaculture investments is Ocean Farm Technologies, developers of the Aquapod pictured above. Inset: Aquacopia cofounder and managing director David Tze.

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Marine Harvest cuts production and staffing at BC facilities

World salmon glut takes the blame

Marine Harvest Canada, the country's largest salmon-farming company and one of the largest employers on northern Vancouver Island in British Columbia, launched a major cutback in production and staffing levels late in October. The cutbacks came as a result of a world oversupply of salmon with Chile re-emerging as a leading competitor in the global marketplace.

Marine Harvest Canada (MHC) and its parent company Marine Harvest SA of Bergen in Norway put out a number of press releases outlining the international situation. Included in that was a third-quarter report from Bergen, explaining that the company as a whole had been cushioned from the impact of the reduced "spot" prices, by having a comparatively robust contract portfolio.

It also noted, however, that the company had performed less well in Canada on a per-kilogram basis than it had in a number of other areas such as Norway, Scotland, the rest of Europe and Chile.

"It's not a secret that BC is a 'high cost area,'" said MHC communications manager Ian Roberts, adding that this encompasses much more than just wages or even the regulatory regime, but that it was for that reason that MHC was chosen as central in the latest round of staffing and production cutbacks.

He said that so far the initiative had seen 15-20 people terminated and provided with severance packages that week; and another 40-45 would be cut in a similar way or by attrition in the next year to bring the cutbacks to about 12%; and production from farm sites would be reduced by around 30% by using the best aspects of the best sites while completely shutting an unknown number of others in as-yet unidentified locations.

"The rapid increase in (global) production (of some 18-19%) has resulted in significantly reduced prices for salmon," said MHC managing director Vincent Erenst in a statement. "To ensure the long-term strength of our business we have to take measures to temporarily reduce our volumes and control production costs."

According to both Erenst and a statement from headquarters, the company expects the increased supply levels to continue well into 2012, and in response MHC will decrease stocking levels by "up to 30%" in 2012 and 2013.

Roberts also said that MHC had also been handicapped in how well it had been able to react to gaps in supply left by the Chilean crisis over the past two years, by what he termed "the unwillingness of the (British Columbian) provincial government to support the industry" and assist it to increase production - in some cases by comparatively small amendments of a few hundred metres to their operating licences and leases.

Roberts noted that the strict regulatory regime required MHC and other companies wanting comparatively minor changes to licences or leases to go through rigorous, costly and endlessly time-consuming application without being sure whether they would be successful at the end.

He said that prevented MHC from moving to new and more productive or efficient locations or even from altering their current sites' locations to make them more efficient and effective, in order to quickly yard up production while Chile was still struggling with ISA.



"To ensure the long-term strength of our business we have to take measures to temporarily reduce our volumes and control production costs"

~ Vincent Erenst, MHC managing Director

Steep decline in spot prices

In Bergen, Norway, MHC's parent company Marine Harvest SA put out a third-quarter report that the very rapid escalation in world supply had triggered what it called a "a steep decline" in spot prices "in all key markets."

And the company says it's expecting more difficult times ahead.

The report concludes: "We expect a continued strong increase in global supply for the rest of 2011 and in 2012. A strong contract portfolio will reduce the impact of low spot prices also in the fourth quarter (of 2011)."

"While the demand stimulus from low prices can have a positive impact on spot prices the coming quarters, we must be prepared for a challenging market in 2012."

Overall throughout the world, says the report, the company will reduce smolt stocking in 2011 and 2012 by 11.3 million fish, cut back on planned capital expenses in 2012 by NOK 600 million (\$110.5m USD).

IMTA message recreated in dance

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includes pieces about everything from nuclear war and Parkinson's Disease to violence against women and Integrated Multi-Trophic Aquaculture.

Chopin has spent the last decade researching IMTA, an ecosystem-based approach to fish farming.

Chopin, his colleagues at UNB and the Department of Fisheries and Oceans are working with Cooke Aquaculture Inc. and Acadian Seaplants Ltd. at eight IMTA sites in the Bay of Fundy.

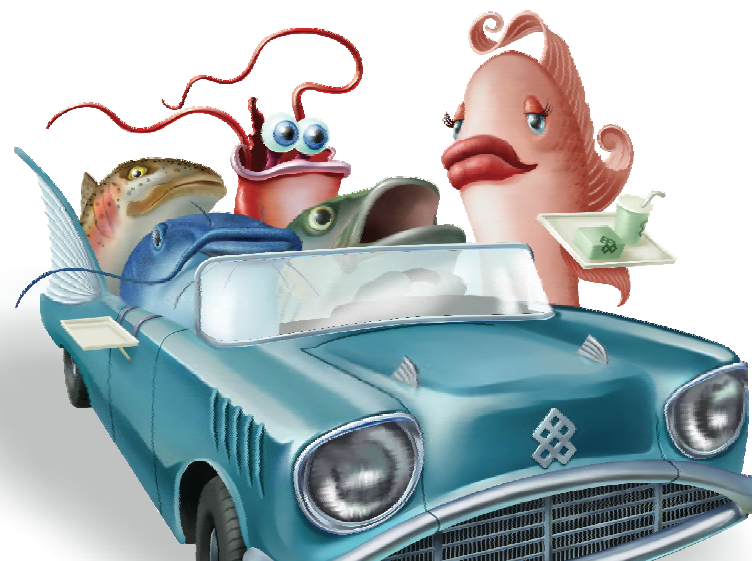
"How Motus O translates salmon, seaweed and mussels into dancing together, that is quite unbelievable... It is beautiful," said Chopin. "Mussels, that was difficult because what does a mussel do? But they were able to do something with blue mussels. The mussels move, but slowly. There's a bit of a freedom of interpretation."

The performance also includes video of IMTA sites, pictures, text and narration to help explain the concept to audiences.

"The whole performance uses many things. It's quite a clever way of combining dancing and music and information," he says. "The message went through. It is unbelievable what we can do when dance and science meet."

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