



<http://theyee.ca/Blogs/TheHook/Environment/2009/01/27/HappyMedium/>

The Hook. POLITICAL NEWS. FRESHLY CAUGHT. A TREE BLOG

'Happy medium' for salmon farming?

By Colleen Kimmett January 27, 2009 08:55 pm [7 comments](#)

The open-net salmon farms that dot B.C.'s coastal water are spreading sea lice to wild stocks. But the alternative, land-based tanks, are too costly to operate at a commercial level.

A Campbell River aquaculture company may have found the happy medium that can make salmon farming sustainable and profitable: big floating tanks.

Agrimarine Industries is currently building a large tank, made of high-density foam and fiberglass, that will float in the waters of Middle Bay, off the southeast coast of Vancouver Island. The project is a compromise between land-based systems, which completely isolate farmed fish from the marine environment, and [open-net marine systems](#), said director of operations Rob Walker.

Agrimarine did operate a land-based closed containment system in Cedar until 2005, but the technology was too expensive to be commercially viable, said Walker.

"At Cedar we were pumping uphill all the time with 75-horsepower motors," he said. "The whole closed system is very expensive, it requires high capital outlay and high maintenance and operations costs as well."

Walker said this technology allows water to flow through but captures waste and disposes of it on land. He said it "doesn't directly address the issue of sea lice," but will attempt to avoid infection by drawing water from deep down if necessary -- sea lice tend to congregate near the surface of the ocean.

Corey Peet, aquaculture specialist with the David Suzuki Foundation, said this approach to salmon farming is "definitely a good step forward, but we will have to see what the results are."

"In theory it's the right idea. I think it is likely a happy medium between land-based and open-net systems," he said. "If and when we find have a good solid example of sustainable farmed production, I think it's going to get a lot of support from NGOs."

The first tank -- which is 24 meters across and holds 3,000 cubic meters of water -- will likely be launched this July with at least four more tanks to follow, said Walker.

Colleen Kimmett is a Vancouver-based journalist who writes about science and the environment.

<http://wildsingaporenews.blogspot.com/2009/01/wwf-plans-next-phase-for-sustainable.html>

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WWF plans next phase for sustainable aquaculture standards

WWF 27 Jan 09;

Comprehensive certification for sustainable aquaculture came closer to fruition today with an announcement by WWF that it would co-found the Aquaculture Stewardship Council to take eventual possession of the global standards for responsible seafood farming currently being developed by the WWF-supported Aquaculture Dialogue roundtables.

The new body, modelled on the highly successful and world leading Marine Stewardship Council (MSC) for wild-caught seafood, will be responsible for hiring independent, third-party auditors to certify farms that are in compliance with the standards.

WWF is funding the development of a business plan for this new venture, which is expected to be in operation within two years, and will contribute funding to implement the plan.

More than 2,000 farmers, conservationists, government officials and others participate in the open Aquaculture Dialogue meetings – making this the world's most inclusive and transparent process for creating measurable, performance-based standards for aquaculture. WWF, which coordinates the Dialogues, is one of the stakeholder groups engaged in the process.

“This is an unprecedented effort to ensure that future aquaculture is environmentally sustainable, and also well positioned to meet the growing demand for seafood worldwide,” said WWF-International Director General James Leape.

“These new standards will raise the bar in the industry, giving consumers assurance that their food purchases are helping to protect the environment.”

Over the next year, draft standards for minimizing the key environmental and social impacts associated with aquaculture will be completed for nine aquaculture species that have the greatest impact on the environment, highest market value and/or the heaviest trading in the global market. They are salmon, shrimp, trout, pangasius, abalone, mussels, clams, oysters and scallops. Draft standards for tilapia were posted for public comment in September 2008 and are expected to be completed this spring.

“This investment aligns perfectly with WWF's goal of protecting the world's oceans and coastal habitats while providing innovative paths for feeding the world more efficiently and sustainably,” said WWF-US President Carter Roberts,

“With a credible entity in place for certifying farmed seafood, the seafood industry can continue to grow but in a way that is environmentally responsible.”

A key component of the business plan will be following the International Social and Environmental Accreditation and Labelling (ISEAL) Alliance's guidelines for certification programs – the world's most reputable guidelines for addressing social and environmental issues. None of the existing aquaculture certification schemes have governance structures that are in compliance with ISEAL. The MSC and Forestry Stewardship Council, also co-founded by WWF, are ISEAL compliant.

<http://fis.com/fis/worldnews/worldnews.asp?l=e&ndb=1&id=28523>



Cultivation techniques used for growing and feeding bivalve shellfish. (Photo: WWF)

Abalone Aquaculture Dialogue series begins



WORLDWIDE

Monday, May 26, 2008, 21:30 (GMT + 9)

Participants of the first meeting of the Abalone Aquaculture Dialogue have begun developing standards for certifying ecologically-friendly farmed abalone, the World Wildlife Fund (WWF) announced on Friday. The process of developing standards will be continued at Dialogue meetings to be held in South Africa and Thailand within the next year.

Held in Australia last month, participants identified key biosecurity, genetic, and environmental impacts associated with abalone farming and agreed on goals regarding those impacts. The fully measurable standards are to be based on the latest science related to abalone farming, and are being developed with input from industry stakeholders, including producers, academics, retailers, NGOs and government officials.

Specific areas to focus on in order to reduce the impacts of abalone farming were also categorised by Dialogue participants. These include: disease, broodstock/seed procurement, and the translocation of exotic abalone species in terms of biosecurity, a WWF press release states.

“We recognise that environmental sustainability is critical to future rural growth and prosperity through aquaculture,” said Ann Fleming of the Australian Abalone Growers Association.



Abalone aquaculture. (Photo: WWF)

“The outcomes of this Dialogue meeting will be built on in future Dialogues in other countries. Australian farmers look forward to continuing to work with WWF to improve on their existing environmental credentials and gain global recognition for their lead role and dedication to protecting the environment.”

Approximately 70 per cent of global abalone production is farmed, with more than 80 per cent of farmed abalone grown in China. The remainder comes mainly from South Korea, South Africa, Taiwan, Australia, Chile and the United States.

“Although abalone are a type of mollusc, the biological requirements and cultivation techniques used to grow the species differ significantly from filter-feeding bivalve shellfish,” said Jose Villalon, director of the WWF-US aquaculture programme. “We initiated an abalone-specific Dialogue to address the unique challenges posed by this type of aquaculture.”

Last month's meeting constituted the first of six Dialogues sponsored by WWF to develop aquaculture certification standards. Other Dialogues underway are for salmon, shrimp, tilapia, bi-valve shellfish, and pangasius.

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denverpost.com

How do they get from there to here?

By Tucker Shaw

The Denver Post

Posted: 01/28/2009 12:30:00 AM MST

Updated: 01/28/2009 11:09:23 AM MST



Nick Aguilar rips a cleaver down the spine of a yellowfin tuna at Seattle Fish Co. (Cyrus McCrimmon, The Denver Post)

It's a question every landlocked seafood lover has: How, exactly, does seafood get here? And: So many thousands of miles from the ocean, how can the fish possibly be fresh?

"Airplanes are good for that," explains chef/owner Amy Vitale of Tables restaurant in Park Hill. "Sure, there's nothing like being up in Maine and getting a fresh lobster. Maybe it's just in your mind, but there is something to that. But fish comes by Fed Ex now. We get it hours after it's been caught."

Vitale purchases her fish from a local fish distributor, Northeast Seafood, which, like other area distributors, makes daily deliveries.

But just because the truck rolls in from the airport with new fish every day, does that mean it's fresh?

A visit to another local seafood supplier, Seattle Fish Co., helps connect the dots from hook to table.

Where dinner says "aloha"

Seattle Fish Co., a nearly century-old Denver outfit that supplies dozens of area retailers and restaurants from the Brown Palace to the Cheesecake Factory to Marczyk Fine Foods, brings in much of its fish, including wild tuna and farmed kam pachi, by air from Hawaii.

Boats in the Pacific use long lines to catch tuna, which are immediately placed in a slurry of crushed ice and salt water to keep the fish at a constant temperature: just at, but not below, the freezing point. Boats are typically at sea for several days before they arrive at the hectic, early-morning fish auction in Hawaii, where sharp-eyed buyers and brokers contracted by the Seattle Fish gather to inspect the catch for purchase.

"I know these guys well," Harry Mahleres, the company's director of purchasing, says of his buyers. "I have to trust them to get the best. It's a good-old-boy, manual system."

As the fish are brought into the chilly warehouse for display, a sample of flesh is "notched" from the tail of each fish for buyers to evaluate. Fish are then tagged to denote freshness and quality, and the bidding begins. Fatter fish and the most recent catches fetch the highest prices.

Off with their heads!

After the fish are purchased, they lose their heads and gills (much of this offal goes to fish feed for farmed stocks, or to pet-food products). Then they're flown immediately to Denver, often arriving at DIA in the wee hours of the morning.

It's a 2 4/7 operation. "You have to move fast," says Mahleres. "Freshness is everything in this business."

Gel packs and insulated boxes keep the fish at a constant temperature in the air; if the flight is delayed or the insulation is breached, it's the shipper who eats the cost of lost product.

Welcome to Denver

At DIA, the fish are quickly loaded into refrigerated trucks and



It's freezing here: Seattle Seafood Co.'s ice-cold warehouse. Fish must not break the 40-degree barrier. (Cyrus McCrimmon, The Denver Post)

brought to Seattle Fish's temperature-controlled (read: near-freezing) processing plant in north Denver. There, the product is re-evaluated for quality and temperature (if the flesh has reached 40 degrees, the fish is discarded), screened again for bacteria and other imperfections, then processed and portioned for distribution to stores and restaurants.

Seattle Fish maintains an active, spotless, and frequently inspected facility, which is no small task in the face of the dramatic butchery that happens on-site. Watching an authoritative knifeman disassemble a 150-pound tuna is not for the faint of heart. But dangerously sharp blades and expert skill quickly transform a human-sized swimmer into so many blood-red steaks.

For some larger fish not sold whole (tuna, swordfish, halibut), the flesh is quickly treated with ozone (a naturally occurring oxygen compound) to retard bacterial development. The fish is then shrink-wrapped in breathable plastic and labeled for delivery by refrigerated truck — just hours before it hits the table.

Tender freezing care

In the best case, this high-tech journey gets Pacific fish from hook to kitchen within 48 hours, but most wild-caught fish, particularly those delivered to restaurants in the mountains, are older than that, having spent a few days in controlled temperatures along the way.

Derek Figueroa, chief operating officer for Seattle Fish Co., insists that as long as the fish is correctly handled along its journey, that extra time doesn't compromise quality or freshness.

"I'd be lying if I said I didn't think that the best fish was the one you've just caught yourself and thrown on the grill," says Figueroa. "But that can't happen every day."

Figueroa says that Denver's access to fresh seafood isn't so different from coastal cities. If you serve Pacific fish on the East Coast, it spends even more time in transit.

"In many ways, Denver is ideally situated to have fresh seafood from both coasts."

This unlikely accessibility to high-quality seafood is not lost on Denver eaters. "The Denver consumer is sophisticated," says Figueroa. "And fish is so transparent. You can't fake freshness."

No disguises at the table

Dave Kauder, Whole Foods' seafood coordinator for the Rocky Mountain region, agrees. "It's really not too hard to know if a fish is bad or not. If it's slimy or smelly, it's bad — and you'll know it."

Kauder, like Figueroa, lauds the state's seafood sophisticates. "We sell more fish on average in the Rocky Mountain region than the other regions," he says. "Coloradans traditionally eat a lot of seafood."

"Salmon is still the number one fish no matter what the variety," Kauder says. "Then cod, tuna, sea bass, halibut, the basics. But we now stock 20 species at some of our stores."

Tables' Chef Vitale, and her customers, have also seen a diversification in available species of seafood.

"My customers know more about fish and seafood all the time. If you put monkfish on the menu five years ago, it would have been a hard sell. But now, customers say, 'Oh, the poor man's lobster!'"

Tips for buying fish

By John Broening, Special to the Denver Post

- 1. Buy from vendors** who sell most of their stock on a daily basis.
- 2. Buy fish on the bone** whenever possible (it'll stay fresher longer).
- 3. If you buy a piece of a fillet**, ask for your fishmonger to cut it from the section near the head. The tail is usually leaner and less flavorful, as well as being more fibrous and having a greater proportion of the strong-tasting bloodline. This is especially true for tuna.
- 4. If you're buying whole fish**, look for clear eyes, reddish gills and shiny skin. If you have a chance to smell the fish, do so. It should smell clean and briny.
- 5. If you're buying fillets** that still have the small pinbones still in them, the pin bones should cling tightly to the flesh of the fish.

John Broening cooks at Duo restaurant, duodenver.com.

Fish is healthy for us, sure, but what about the oceans?

According to Alison Barratt of the Monterey Bay Aquarium in Monterey, Calif., nearly 70 percent of the world's fisheries are "either fished to capacity or overfished." What's more, a quarter of the global catch is discarded as "bycatch"- including unwanted fish, sea turtles, sharks and at-risk bird species.

The global impact of fishing and fish farming (aquaculture) on the ocean is severe, said Barratt, and getting worse.

"It's not surprising that people are less aware about the issues with seafood. When we look at the ocean, it looks fine. It's not like looking at the Amazon, where you can see the forest shrinking day by day. So making that connection is harder for people."

Seafood Watch, a nonprofit program the aquarium started in 1997, maintains an up-to-date guide to help consumers and vendors make informed fish purchases.

The Seafood Watch guide lists dozens of fish, tagging each with a green (best choice), yellow (good alternative) or red (avoid) code, based on strict criteria including the size of the stocks, the vulnerability of the species to overfishing, the extent of the "bycatch," environmental impact and the management practices of the operation.

"People always look at the red list first," Barratt says. "They're disappointed, and surprised, to see things like farmed salmon. With farmed salmon, they think they're giving the ocean a break. But it takes 3 pounds of

caught fish (processed into feed) to produce 1 pound of salmon. You're actually draining the ocean of protein that you could use 'as is,' and you're left with untreated sewage."

But Barratt doesn't discount aquaculture entirely. "We're finding ways to farm in a more sustainable manner because the demand for seafood is increasing- but what we can take out of the ocean wild is decreasing. Agriculture on land has been around for thousands of years. Aquaculture is very new. It's only been around for 30 to 50 years. There are new innovations on the horizon."

Dave Kauder, Whole Foods' seafood coordinator for the Rocky Mountain region, sells both wild and farmed salmon — with a caveat.

"Yes, there are some scary farming practices out there. But if we're farming seafood correctly and safely, then we're not depleting our oceans. We know exactly where our farmed seafood comes from. We use a farm in Norway for our farmed salmon. It is the only farm in the world that meets our standards. It's environmentally friendly and we know what the stocks have been fed. A lot of farmed fish are fed things like chicken byproducts. We don't want to give our salmon anything they wouldn't naturally eat, and salmon don't naturally eat chicken."

Derek Figueroa, chief operating officer of the Seattle Fish Co. in Denver, which sells both wild and farmed salmon, is also optimistic about farming.

"We know that wild stocks are insufficient to service the demand for salmon. We know we can only effect change by working together. It feels like a partnership now."

Much of the innovation is happening in the U.S. "If it's farmed or caught in the United States, it's often a better choice than imported," Barratt says, citing relatively stringent laws in the United States, including trap doors to release sea turtles from shrimp trawlers and mechanisms to shoo away the albatross that might get caught in an Alaskan net.

"It's not to say that things are not being done well in other places, but it's hard to monitor across borders, to create the chain of custody. Stuff gets shipped all over the world. What's caught in one country is processed in another." And that, Barratt says, can obscure the issue.

Ultimately, she sees change coming from consumers.

"Consuming seafood is a personal choice," she says. "If we ask for better choices, ultimately the fish-supply chain will change."

Visit seafoodwatch.org for more on the Seafood Watch program. The Marine Stewardship Council (msc.org) also offers consumer news and tips.

Tucker Shaw

http://www.fishupdate.com/news/fullstory.php/aid/12113/WWF_to_help_found_Aquaculture_Stewardship_Council_.html

FISHupdate.com

WWF to help found Aquaculture Stewardship Council

Published: 27 January, 2009



Global standards for responsible seafood farming, which are under development by the Aquaculture Dialogue roundtables, will be managed by a new entity to be co-founded by World Wildlife Fund (WWF).

The new Aquaculture Stewardship Council (ASC) will be responsible for hiring independent, third party auditors to certify farms that are in compliance with the standards. WWF is fully funding the business development phase for the ASC and the business strategy for this new venture, which is expected to be in operation within two years. WWF also will help fund the implementation of the strategy.

More than 2,000 farmers, conservationists, government officials and others participate in the open Aquaculture Dialogue meetings – making this the world’s most inclusive and transparent process for creating measurable, performance-based standards for aquaculture. WWF, which coordinates the Dialogues, is one of the stakeholder groups engaged in the process.

“This is an unprecedented effort to ensure that future aquaculture is environmentally sustainable, and well-positioned to meet the growing demand for seafood worldwide,” said WWF-International Director General James P. Leape. “These new standards will raise the bar in the industry, giving consumers assurance that their food purchases are good for the environment.”

Added WWF-US President Carter Roberts, “This investment aligns perfectly with WWF’s goal of protecting the world’s oceans and coastal habitats while providing innovative paths for feeding the world more efficiently and sustainably. With a credible entity in place for certifying farmed seafood, the seafood industry can continue to grow but in a way that is environmentally responsible.”

Over the next year, draft standards for minimizing the key environmental and social impacts associated with aquaculture will be completed for 11 aquaculture species that have the greatest impact on the environment, highest market value and/or the heaviest trading in the global market. They are salmon, shrimp, trout, pangasius, abalone, mussels, clams, oysters, scallops, cobia and Seriola. Draft standards for tilapia were posted for public comment in September 2008 and final standards for tilapia are expected to be completed this spring.

A key component of the ASC business strategy will be following the International Social and Environmental Accreditation and Labeling (ISEAL) Alliance’s guidelines for certification programs – the world’s most reputable guidelines for addressing social and environmental issues. None of the existing aquaculture certification schemes have governance structures that are in compliance with ISEAL. The Marine Stewardship Council and Forestry Stewardship Council, also co-founded by WWF, are ISEAL compliant.

For more information about the Aquaculture Dialogues, go to www.worldwildlife.org/aquadialogues

http://www.shetlandmarine.com/2009/04%20Aquaculture/jobs_boost_for_salmon_industry.htm

Shetland Marine News



Jobs boost for salmon industry

Hans J Marter

27 January, 2009

TWO Shetland salmon processing companies are to benefit from more than £1.1 million of European money to extend their facilities in the isles, and create 17 new jobs.

The grant assistance through the new European Fisheries Fund was announced yesterday (Monday) to coincide with the visit of Scottish environment minister Mike Russell.

Lerwick Fish Traders will receive £420,000 towards a new integrated Baader grading and processing line, while Greenock based salmon oil producer Rossyew has been granted £738,000 to set up a plant in the isles to serve the local aquaculture industry.

Both payments have been fast tracked in response to the recent outbreak of ISA in the isles and to give Mr Russell some good news to bring with him.

Mr Russell said: "This investment and the jobs it will create and support will therefore be welcome news for both of these companies and for the Shetland community as a whole."

LFT's grant assistance will trigger a £1.4 million investment, which will help to increase the current workforce from 93 full time staff to over 100.

Company manager Michael Stark was in meetings with the environment minister all day yesterday, and unable to respond to a request for comment.

Rossyew's sales director Ian Wright said he was delighted with the award which would enable the company to go ahead with a £1.2 million expansion to the isles.

The company turns salmon by-products such as guts and heads into salmon oil and salmon protein which is used as ingredients in the pet food and animal feed industries.

He said a final decision on a location in the isles had not been made yet and therefore he was unable to say when the new plant would be up and running. However a decision was "imminent", he said.

He added: "Shetland is a significant producer of salmon. It makes sense logistically and economically to process the by-product on the islands rather than off the islands.

"We are not dealing with mortalities at all. We are dealing with what is fit for human consumption, but is removed in processing such as the head, the guts and the frame, which would not normally be consumed."

At present most of the off cuts are shipped to Norway for processing.

Mr Russell added: "Lerwick Fish Traders and Rossyew Ltd are the first of a number of beneficiaries from EFF.

"We hope to aid many more companies in developing a profitable and prosperous fish sector for Scotland in the coming months, and further news of successful EFF bids will be announced in the coming weeks."

<http://www.patagoniatimes.cl/index.php/20090127732/News/Salmon-News/CHILES-CDE-TO-INVESTIAGATE-ESCAPED-FISH-INCIDENT.html>



CHILE'S CDE TO INVESTIGATE ESCAPED FISH INCIDENT



Written by Patagonia Times Staff

Tuesday, 27 January 2009



Researchers say to 1.9 million salmon may escape each year in Lago Llanquihue (above)

Photo by Benjamin Witte

Chile's State Defense Council (CDE) is launching an investigation into last month's large-scale salmon and trout escape in Region X, the daily *La Tercera* reported this week.

The CDE – the government prosecutor's office – is soliciting information from Puerto Montt maritime authorities and from the National Fishing Service (SERNAPESCA) to determine the extent of environmental damage caused by the incident. Depending on the results, the CDE could file law suits.

In late December, bad weather allowed thousands of trout and salmon to escape from several Region X fish farms (PT, Jan.19). SERNAPESCA reported that in total nearly 730,000 fish escaped. Aguas Claras lost some 668,000 trout from farms in Isla Queullín and Ensenada Quetén. Nearly 60,000 salmon escaped from a Mainstream-owned facility near Calbuco. And approximately 2,000 salmon swam off from a Trusal-owned farm in Bahía Lenca.

The Trusal facility, SERNAPESCA later confirmed, was experiencing an outbreak of Infectious Salmon Anemia (ISA) at the time of the escape. A highly contagious virus, ISA can be lethal to fish but does not affect humans. ISA first appeared in Chilean waters in mid 2007. Since then the disease has spread throughout the country's salmon farming regions (X, XI and XII) and triggered a major downturn for the once booming aquaculture industry.

The incident attracted heavy criticism from environmental groups and small-scale fisher organizations that have long warned of problems associated with escaped salmon and trout. The carnivorous – and introduced – species prey on native fish and thus are a major stress on the environment, insist groups such as Oceana, an international NGO. They can also spread disease to naturally occurring stock.

"Salmon escapes are one of the most critical issues related to salmon farming," said Oceana head Alex Muñoz. "Since salmon are introduced species, their escape into the wild results in severe impacts on local marine ecosystems and other fish species."

A recent study by researchers from Chile's Universidad Austral concluded that in Region X's lakes alone, some 3 million salmon escape every year. The study, headed by doctoral candidate Iván Arismendi and published recently in the magazine *Freshwater Biology*, involved data from Region X's Rancho, Puyehue, Rupanco, Llanquihue and Yelcho lakes. Escaped salmon found in those lakes feed primarily on native species and are thus a likely stress the natural ecosystem, the researchers concluded.

SOURCE: LA TERCERA

By Patagonia Times Staff (patagoniatimes@gmail.com)

CHILE: HELP MAY BE ON THE WAY FOR AXED SALMON WORKERS

Written by Patagonia Times Staff

Wednesday, 17 December 2008



Govt hopes shellfish industry (above) can absorb laid off workers

Photo by Benjamin Witte

Efforts by labor leaders to highlight the growing number of job cuts in Chile's farmed salmon industry appear to be paying off, as the government has finally begun airing plans to directly assist laid off workers.

According to the daily La Nación, the government is looking to pump US\$4 million into a jobs creation program that could help up to 3,300 people. Part of the money would go toward paid training. Laid off salmon workers would receive minimum wage salaries during a four-month training period as they develop skills in new areas, particularly in shellfish farming. Money would also be available for workers looking to set up small businesses. In addition, the government plans to create 900 new public works positions.

The proposals come in direct response to recent activity by Region X salmon industry labor leaders, who have mounted a series of protests – in both Puerto Montt and Chiloé – in an effort to draw public attention to the situation (PT, Dec. 10).

Groups such as the National Confederation of Salmon Workers (CONATRASAL) say as many as 6,000 salmon workers have lost their jobs due to the industry's recent slide, which was prompted by an ongoing outbreak of Infectious Salmon Anemia (ISA) and more recently compounded by the current global financial crisis. ISA is a highly contagious virus that can be lethal to fish but does not affect humans. It was first discovered in Chilean waters in mid 2007 and has since spread throughout the country's salmon farming area: Regions X, XI and XII.

With production levels expected to drop significantly in 2009, the number of unemployed salmon workers is expected to rise significantly. That's bad news indeed considering that workers who have already lost their jobs say it is next to impossible to find employment elsewhere.

"We have absolutely no job security," Betty Comiche, a factory worker in Ancud, Chiloé told the Patagonia Times. "We know there are going to be layoffs, but we don't know exactly when. My coworkers have the same uncertainty. These days I don't go to work with much enthusiasm, knowing that tomorrow I may very well be out of a job."

CONATRASAL says it's happy authorities are finally addressing the situation, but worries that given the scope of the

problem, the government's US\$4 million plan won't go nearly far enough.

"Like always, help for the workers arrives late," CONATRASAL's Rosa Bahmonde told OLACH, an Ancud-based NGO. "We had to raise our voices in order to be heard. And if we have to continue doing so we will, especially since the industry has been lining its pockets here for years.

By Patagonia Times Staff (patagoniatimes@gmail.com)

<http://www.guide2.co.nz/politics/news/govt-welcomes-aquaculture-decision-but-promises-changes/11/4746>

Govt Welcomes Aquaculture Decision, But Promises Changes

18 December 2008 - 1:21pm — NZPA



Nick Smith

Wellington, Dec 18 NZPA - The Government has welcomed a decision to allocate more aquaculture space in the Nelson area, but says law changes are needed to speed up the decision-making process.

The Ministry of Fisheries today announced its final decision on the Tasman and Golden Bay Interim Aquaculture Management Area application, approving 850 hectares of new aquaculture space.

Environment Minister Nick Smith and Fisheries Minister Phil Heatley welcomed the decision but said they were disappointed it had taken so long.

Dr Smith said the delay was caused by bad rules, which the Government would try and fix through changes to Resource Management Act (RMA) and aquaculture laws early next year.

"It is disappointing to see how much time, energy and money has been lost going through a tortuous, almost 10-year long process under the RMA and aquaculture laws to get us to this point."

Mr Heatley said the Tasman and Golden Bay local authorities had been trying to develop new aquaculture opportunities in their region, but had been routinely frustrated by problems with the law.

"It is good this new space is finally being made available but it has been a trying and costly process for the local authorities, marine farmers and commercial fishers."

NZPA PAR gf nb

<http://www.ausfoodnews.com.au/2008/12/16/seafood-science-likely-to-see-us-food-authority-promote-increased-fish-consumption.html>



Seafood science likely to see US food authority promote increased fish consumption

- December 16, 2008
- James Ferre

President of IAFI, Jayne Gallagher, has welcomed news that the US Food and Drug Administration (FDA) has advised the USA Government to amend its seafood advisory based on the latest science.

The Washington Post reported on Friday that the FDA has concluded that the greatest benefits to pregnant women and women of childbearing age would come from eating more fish/seafood. There has previously been advice from food standards bodies to moderate consumption during pregnancy due to fears about mercury.

“We have discussed this issue in detail at our last two World Seafood Congresses (Sydney 2005 and Dublin 2007) and it would be excellent if we could be reporting at our next Congress in Agadir, Morocco (5-10 October 2009) that the issue is well on its way to being resolved,” Ms Gallagher said. “The scientific evidence is irresistible on this matter, so much so, that in Dublin we made a unanimous call for all Public Health Authorities to reassess the benefits versus risks regarding mercury in seafood due to growing evidence that fish consumption can reduce the risk of coronary heart disease and can benefit neurodevelopment in the fetus and young children such that reduced or eliminated consumption of fish could actually impose risks.”

“We urge all Government Agencies around the world in charge of dietary guidelines matters to review their current status because the latest scientific evidence shows that the real risk to women and children is not eating enough seafood,” Ms Gallagher suggested.

“In addition, we must now understand that nearly half the fish consumed as food worldwide are from aquaculture rather than caught in the wild (FAO) and to our knowledge mercury has never been an issue with farmed fish. In 1980 just 9 per cent of the fish consumed by human beings came from aquaculture, today just under 50 per cent does, and this is growing,” Ms Gallagher added.

<http://www.smh.com.au/news/entertainment/good-living/recipes/here-comes-the-raw-prawn/2008/12/08/1228584710490.html>



Here comes the raw prawn



Sea-farmed fare ... Ryuichi Yoshii prepares the prawns; a sashimi platter.
Photo: *Sahlan Hayes*

A tasty morsel from North Queensland is making its way on to Sydney's top dinner plates.

IN THE late 1970s, Sydney businessman Ervin Vidor was told there would be a world food crisis in 2010. He was advised to get into aquaculture.

By 1984, after extensive research and investment, he set up Seafarm at Flying Fish Point in Innisfail, 100 kilometres south of Cairns, Australia's first prawn farm with its own hatchery and processing facilities. When he took home six prawns from the first 50-kilogram crop, his wife looked at them and said: "Is that what you've spent \$3 million on? Each of those prawns cost us half a million dollars."

On a recent Monday night, Vidor sat at the sushi bar at Yoshii restaurant at The Rocks with some of Sydney's top chefs.

They included Michael McEneaney from Rockpool, Chui Lee Luk of Claude's, Mai Busayarat from Rambutan, Ty Bellingham from Sailor's Thai and Joe Pavlovich from Glass.

They had a nine-course meal prepared by chef-restaurateur Ryuichi Yoshii. In each course, including a prawn cracker with dessert, he used Seafarm's Crystal Bay-brand sashimi-grade prawns.

That night, Vidor was a very proud prawn farmer. And his wife - who wasn't there on the night - would have seen what all the fuss was about.

In 1986, Seafarm opened a second site, at Cardwell in the Hinchinbrook Channel, 200 kilometres south of Cairns. The Innisfail farm had four prawn-raising ponds; at Cardwell there are now 126 and at Mossman, a third site opened in 2003, there are a further 28. There are now about one million Crystal Bay prawns harvested each year, 95 per cent being sold in Australia.

Crystal Bay prawns are banana prawns (most farmed prawns are tigers) and Seafarm is the only prawn farm with its own breeding stock. Over the years it has been able to select breeding prawns with desirable characteristics including a larger size and better flavour.

Although they're a lighter pink than many farmed prawns, Seafarm resisted the temptation to dye them and doesn't use any artificial or genetically modified inputs.

They are sold green (raw), frozen in blocks and peeled but with the tail on; individually quick-frozen cooked; or whole, fresh green - sashimi grade. Whether fresh or frozen, they all pass through a chilled, lightly salted brine to enhance the flavour.

Seafarm is one of the largest of about 35 prawn farms in Australia producing about 4000 tonnes annually. Most are in Far North Queensland, although there are three at Yamba in northern NSW. Most are small, family-operated businesses producing for the domestic market.

In 2005, the Australian Prawn Farmers Association entered into an eco-efficiency agreement with the Australian Government Department of Environment and Heritage. This agreement covers efficient use of water, energy and waste-output control, among other important measures.

Eating a Crystal Bay sashimi-grade prawn is essentially the same as plucking one from the pristine ocean waters of the pond at the farm in the Hinchinbrook Channel and popping it into your mouth. The hard part is getting the prawn from the farm to the plate.

Not every prawn makes the sashimi grade. Each one has to be unmarked, undamaged and exactly the right size. For every tonne of prawns taken from the ponds on any given day, about 300 kilograms make the grade.

So how do the toughest critics of all - the chefs - rate them? McEneaney, who has been using them for six months at Rockpool, loves "the flavour and the creamy texture". Chui, who has yet to use them in her kitchen, says she has to work out "how I can incorporate them onto my menu" but she loves "the sweetness, the texture and residual flavour" of the raw product.

Yoshii remarks on their "very good texture" and, when used for sashimi, their "sweet flavour - and they were easy to match with other ingredients".

Can we buy the prawns to eat at home? "We're working on getting them to retail outlets in the same pristine state," says Crystal Bay's Scott Walker. "We hope they'll be available by Christmas."

But we'll let you in on a secret. You can buy them at Claudio's and De Costi at the Sydney Fish Market and the outlet of Japanese seafood-wholesaler Wellstone Fresh Seafoods, 201 High Street Willoughby, phone 9958 8599.

Know your prawns

THERE are five species of king prawn (eastern king, red spot, blue leg, greasyback and royal red).

Farmed species are known as tiger or banana prawns.

School prawns (sometimes called harbour prawns) are sweet and tiny. They are estuarine or coastal prawns caught on the east coast, from Queensland to Victoria, before they head out to sea to grow.

Fresh raw or green prawns have a sheen, smell "prawny" and the flesh is translucent. Black marks around the legs are a sign of oxidation.

A fresh cooked prawn has a sweet, musky smell and a bright-pink colour. The shell cracks when you peel it.

It should have a firm texture and flavour all along the palate.

Fresh green: green meaning raw and the hardest to get. Crystal Bay sashimi grade is a good bet.

Green slurried: green prawns transported in a slurry of ice and water.

Green frozen: most prawns are snap frozen on the boat as soon as they're caught, even the green ones.

Cooked: snap frozen on the boat.

Yoshii's cucumber and Crystal Bay prawn sashimi

10 lebanese cucumbers
20 Crystal Bay sashimi-grade prawns
Small bunch shiso (perilla) leaf, picked through
Table salt
Water

Cut the cucumbers into five-centimetre-long pieces. Hollow out the centre. Soak the cucumber pieces in brine (1/4 cup salt to one litre of water) for about five minutes. Remove the cucumber when softened and dry. Peel prawns, remove head and tail and cut in half lengthways. Roll them around a small pinch of shiso leaves and place inside the hollowed-out cucumber. Serve with a good sake.

<http://www.abc.net.au/rural/news/content/200812/s2441525.htm>

Barra booming in tough times

Tuesday, 09/12/2008

The economic gloom is failing to cast a shadow over the barramundi aquaculture industry.

Australia's production of farmed barra is forecast to double in the next few years and Far North Queensland fish farmers will increase production despite the economic uncertainty.

Marty Phillips, who owns a barramundi farm near Innisfail, says despite his price being affected by reduced consumer spending, the long-term outlook for the industry is bright.

"We purchased this parcel of land with the view to develop it for aquaculture," he says.

"It was always the intention to get there, it gives us a little bit better economies of scale, we'll be a bit more efficient operation.

"If we stock them all this year, and I do stock them, maybe i'll be able to fallow some of the others a bit longer, rather than having the whole farm running flat out."

<http://www.patagoniatimes.cl/index.php/20081202700/News/Salmon-News/CHILE-SALMON-UNIONS-BLAST-GOVT-RESCUE-PLAN.html>



CHILE SALMON UNIONS BLAST GOVT RESCUE PLAN



Written by Benjamin Witte

Tuesday, 02 December 2008



Unions demand government assistance for laid off workers
Photo by Miguel Sánchez, OLACH

Labor Leaders Say Laid Off Workers Need Subsidies

The government's recently announced salmon industry relief package has done little to appease frustrated labor leaders, who say the measures ignore the immediate needs of thousands of laid off workers.

Last Thursday, President Michelle Bachelet announced her government will guarantee millions of dollars in loans to struggling salmon companies, which have been hit hard over the past year-and-a-half by an ongoing outbreak of Infectious Salmon Anemia (ISA). A highly contagious virus, ISA can be lethal to fish but does not affect humans.

The government plan also calls for updating salmon-farming regulations related to sanitation and environment, including a plan to reduce the use of antibiotics in farmed fish ([PT, Dec. 1](#)). Additionally, Bachelet said Chile will join Canada and Norway in co-financing research to map the salmon genome, "which will allow the country to carry out research to improve the species through variables like growth or resistance."

The rescue measures were well received by SalmonChile, the country's principal private producers association. "The measures are a sign of confidence and demonstrate that salmon farming is viable and has a big future in the southernmost regions of the country," said SalmonChile President César Barros. "We hope the banks cooperate enthusiastically with this initiative and provide the necessary loans."

Representatives from the industry's many labor unions, however, say the aid package does nothing to help the numerous workers who have lost their jobs in recent months. Labor leaders say as many as 6,000 industry employees have been laid off over the past year. SalmonChile puts the figure at around 2,000.

On Tuesday, representatives from the Central Workers Union (CUT), the National Confederation of Salmon Industry Workers (CONATRASAL) and other Region X-based labor groups took their frustrations to the streets of Puerto Montt.

"We're upset that the government, while offering unconditional support for the salmon companies, doesn't come up with any concrete measures for the workers," Doris Paredes, president of CUT's Llanquihue chapter, told the Patagonia Times.

"To date the salmon industry has laid off 6,000 people. And between now and the end of the year there are going to be 1,000 more," she added. "And the numbers will continue to rise gradually. We don't expect the companies to lay off a huge number at once. Instead, to avoid negative publicity, they're letting a few people go every 15 days or so."

The approximately 100 labor leaders involved in Tuesday's protest described it as a wake-up call. They plan to continue mounting public demonstrations – starting next Tuesday in Chiloé – until the government begins offering assistance to unemployed workers. In addition to direct subsidies, the unions are also asking that laid off workers be

temporarily exempt from paying off housing and other loans.

“We hope that the government will quickly adopt measures that are proportionate to the catastrophic social situation brought on by the crisis in the salmon farming regions,” CONATRASAL declared. “This will require a coordinated plan to help the most affected districts by creating new and decent jobs, as well as specific subsidies for the thousands of unemployed.”

In 2006 the Chilean farmed salmon and trout industry earned a record US\$2.207 billion, capping off an impressive 15-year run during which production expanded by an incredible 2,200 percent. Between 2003 and 2006 alone, export earnings grew by an average 22 percent per year, prompting predictions that Chile would soon surpass Norway as the world’s top producer.

Since then, however, the country’s so-called “orange gold” has lost a bit of its luster. Reports began surfacing in early 2007 about serious sea lice infestations. Sea lice, or *Caligus*, are parasitic crustaceans that attach themselves to fish, marking their hosts with ugly lesions that lessen their market value, stunt their growth and leave them prone to a variety of sometimes fatal illnesses. Then, in July of that year, researchers confirmed the presence in Chilean waters of precisely such a disease: ISA.

First discovered on a farm near the island of Chiloé, the ISA virus has since spread throughout Region X – which continues to house the lion’s share of Chilean salmon production – as well as into Regions XI and XII. The now widespread disease has led to a major industry slowdown. In 2007 export earnings grew by just 2 percent. So far this year, growth is stagnant.

The slowdown, in turn, is prompting a more widespread regional slump, particularly in Region X, whose economy is extremely dependent on the once-booming industry. The situation is particularly dire for the rising number of unemployed workers, who are finding it increasingly difficult to secure employment elsewhere.

“Salmon, unfortunately, is what moves this area. It’s the only industry that provides widespread employment, that is able to absorb the workforce. Because everything around here depends on salmon,” said Paredes. “Maybe on a national level, the layoffs that are taking place in the area aren’t that significant. But in terms of their local impact, it’s huge.”

By Benjamin Witte (patagoniatimes@gmail.com)

<http://www.theaustralian.news.com.au/business/story/0,28124,24720766-5001942,00.html>

Clean Seas Tuna to reproduce bluefin tuna

SMALL-CAP SPOTLIGHT: www.wise-owl.com | *December 03, 2008*

Article from: [The Australian](#)

Company: Clean Seas Tuna Limited (CSS)

Market Capitalisation: \$55 million

Recommendation: Hold

WHEN we think of farming, we usually think of green pastures and cows. Rarely do we think of the ocean.

Clean Seas Tuna is in the aquaculture industry with the aim of farming southern bluefin tuna, essentially reproducing the complete lifecycle from egg to adult fish.

Another part of its business is breeding and selling kingfish and mulloway.

Clean Seas Tuna's expertise comes from its parent company and main shareholder, the Stehr Group, which has three decades of experience in tuna fishing and offshore farming of fish.

Wise-owl.com analyst Sven Restel says: "The revenue from kingfish and mulloway is mainly used to give the company some cash flow until they can achieve reproduction of the whole tuna lifecycle.

"Once this happens, we would expect investor interest to increase." As opposed to kingfish and mulloway sales, bluefin tuna is a higher-margin business. Often used in sashimi and sushi, the fish attracts strong demand from Japan.

However, the threat of endangerment has seen authorities try to preserve the species by installing a worldwide "catch quota". In place since 1985, this measure has made southern bluefin tuna quite valuable.

Clean Sea's aim is to fully control the lifecycle by producing 10,000 tonnes of southern bluefin tuna at a margin of \$10,000 a tonne by 2011-12. Restel states: "The company has had success over the year with the production of bluefin tuna eggs and some larvae. The next step is to fully control the harvest of fingerlings."

Clean Seas has an offshore breeding facility by Arno Bay in South Australia. During the previous financial year, kingfish production increased by 150 per cent and sales by 90 per cent. However, due to low margins and research and development costs, the company is not yet making a profit.

"Margins can be improved through value-adding products and lowering costs through frozen portions," Restel says. A new aquaculture harvest vessel has recently been deployed that can provide constant cold chain control, which will help lower the logistics cost.

If the company finds success in harvesting southern bluefin tuna, it will be able to control a large part of the supply chain, which can be very lucrative. "The company has great potential and we are keeping a close eye on it," says Restel.

<http://www.thewest.com.au/default.aspx?MenuID=3&ContentID=111453>

thewest.com.au The West Australian

Western Kingfish runs aground

4th December 2008, 6:00 WST

Listed aquaculture play Western Kingfish has called in administrators less than 18 months after listing in an \$8 million float backed by a string of high-profile names which reportedly included Lachlan Murdoch.

The Jurien Bay-based fish farmer ran into difficulty earlier this month after what is believed to be a common bacterial infection took hold of 30 per cent of its initial yellowtail kingfish cohort.

The fish mortality from the 50,000-member cohort has since risen to about 70 per cent.

It has since transferred its second cohort of 55,000 fish to sea, but the event disrupted its attempts to complete a much-needed capital raising and it was forced to scrap a proposed share purchase plan last week.

Plans to begin commercial breeding trials of rock lobster and Moreton Bay bugs were also put on hold as its cash squeeze worsened.

Administrator Andrew Saker, of Ferrier Hodgson, confirmed he had been called in late on Tuesday and was working through the group's financials with its directors.

"I believe they've got cash available to meet their liabilities, but they've just put in a new cohort and they're going to need capital to take that through and complete the cycle," he said.

He expected to have more information about the company's financial situation before an initial meeting of creditors, of which there are believed to be about 80, is held next week.

Western Kingfish director Andrew Mitton yesterday confirmed the group had been struggling to raise enough capital to take it through to harvest of the initial cohort, scheduled for March next year.

If successful, proceeds from the sale of the stock — kingfish has a high oil content and is especially valued as a sushi ingredient in Asian markets — would have reaped \$2 million.

"Aquaculture's a very worthwhile activity but it can be quite costly initially," a disappointed Mr Mitton said.

"While we should be able to pay our creditors, that's not the issue — the issue is we should be doing our very best for WA and for the aquaculture industry, and to not even get to the first harvest would be a complete tragedy for this town. Yes we're down but we're not out and we're doing all we can to get back on our feet."

In the meantime, directors were seeking immediate funding, including seeking support from some sector colleagues and the State Government.

The stock, which floated at 25¢ a share in a heavily oversubscribed float, last traded at 6.5¢ on November 20.

Established aquaculture play Australis Aquaculture, which took a 4 per cent stake in the group at the float, remains one of Western Kingfish's biggest shareholders.

Both companies were founded by Stewart Graham, who recruited Mr Mitton to the Jurien Bay operations last year from Tasmanian salmon farmer Van Diemen Aquaculture.

RACHEL DONKIN

<http://www.abc.net.au/news/stories/2008/12/04/2437709.htm>



Fish farm in administration after stock losses

Posted Thu Dec 4, 2008 12:16pm AEDT

A Jurien Bay aquaculture farm which suffered severe fish stock losses from an unknown bacteria last month has been placed into voluntary administration.

In a brief statement, Western Kingfish said the recent deaths of more than 30,000 fish, along with the difficult economic climate, had led to a decision to appoint administrators.

The company is one of the first yellowtail kingfish farms in the state and began operations in July.

<http://www.thewest.com.au/default.aspx?MenuID=77&ContentID=109625>

Farm trial off Two Rocks promises seafood bounty

24th November 2008, 6:00 WST

Australia's first open-ocean fish farm, off the coast of Two Rocks north of Perth, could be producing 100,000 tonnes of seafood a year within five years, a leading aquaculture body said yesterday.

Aquaculture Development Council board member Greg Jenkins said the pilot project with 170,000 yellowtail kingfish could pave the way for a bigger industry that would reduce Australia's dependence on imported fish.

"You could have 100,000 tonnes of fish production coming out of that site," Mr Jenkins said. "Not only can we have an export product to bring in revenue to the State, but also to supply fresh fish to locals."



At 10 nautical miles off the coast, the pilot stage of the farm will involve floating and submersible cages each holding up to 50,000 tonnes of the native yellowtail kingfish, renowned for its firm flesh with high levels of omega-3 essential fatty acids.

Today's launch of the trial coincides with renewed concerns about the future of the local fishing industry, with fears that the population of five species of prized local fish, including dhufish, could collapse without tough restrictions on commercial and recreational fishermen.

Mr Jenkins said the aquapod and ocean spar cages planned for the farm allowed water to flow through them for easy removal of waste and were designed to cope with rough openocean conditions.

The torpedo-shaped fish are fed pellets through a hatch in the top by workers on a barge and the fish are expected to grow from about 50g to 3kg each within 12 months.

Mr Jenkins said the State Government-funded council was bankrolling the two-year 50ha trial, with Challenger TAFE providing the breeding stock.

But he said the bulk of the funding for the farm would eventually come from industry partners once it reached full commercial production.

As the first fish farm in Australia based in the open ocean rather than on-shore waters, Mr Jenkins said the Two Rocks site was ideal because the farm could be expanded without encroaching on areas that were environmentally sensitive or favoured by leisure or commercial boats.

He said 70 per cent of fish on the Australian market were imported and if expanded the farm could produce fish for the local market, as well as for European and American consumers. "We don't have a lot of fish production ourselves in Australia and now we've got wild stocks declining as well," he said.

"We've got a choice to make — in the future, we've got to be happy to keep on importing cheap fish, which is all aquaculture fish from Asia and eat more and more imported aquaculture fish, or produce our own high quality fish."

KATE TARALA

<http://www.abc.net.au/rural/news/content/200811/s2428890.htm>

WA kingfish stocks hit by disease

Tuesday, 25/11/2008

A bacterial infection has wiped out almost half the stock in one of Western Australia's offshore fish farms.

Fifteen thousand yellowtail kingfish have died over the last week, with many more fatalities expected before the infection is contained.

Directors of the company have declined to speak to the media.

However, the chair of the Aquaculture Council of Western Australia, Max Ball, says the black cloud over western kingfish may contain a silver lining for the industry.

"Other aquaculture companies will certainly watch it, but they'll be watching it from a professional point of view, not worried about the investment point of view," he says.

"They'll be watching it to see how the company deals with it, because it's from these experiences (that they) learn how to handle and manage their fish projects better."

<http://www.thefishsite.com/fishnews/8395/spencer-gulf-pollution-could-ruin-fisheries>



Spencer Gulf Pollution Could Ruin Fisheries

AUSTRALIA - The head of Cleanseas has warned against Gulf pollution by threatening an 'inevitable' and 'huge' comensation claim would follow.

According to [ABCnews](#), Cleanseas Tuna chairman Hagen Stehr yesterday addressed shareholders at the company's annual general meeting.

Among issues raised was a proposed desalination plant in the Upper Gulf and possible mineral exports through Port Lincoln.

Mr Stehr is warning that wild fisheries such as prawns are among those at risk and mining companies better get things right or face a big compensation battle.

"Nobody will stand by and just take it easy, everyone will be concerned, so we ought to in the spirit of cooperation, we have to do our assessments very, very thoroughly for the future, not just today or tomorrow," he said.

<http://www.thefishsite.com/fishnews/8390/bacteria-decimates-western-kingfish-stock>



Bacteria Decimates Western Kingfish Stock

Wednesday, November 19, 2008

AUSTRALIA - An aquaculture company could lose up to 70 per cent of its stock 15,000 Yellowtail Kingfish were wiped out by bacteria.

Western Kingfish executive director Andrew Mitton said the company could be left with only about 16,000 of the 50,000 fish it started with, leading the firm to revise plans to raise up to \$2.9 million through a share purchase plan, with shares sold at 15 cents each, reported *TheWest*.

The news agency said that Western Kingfish suspended trade in its shares last week after it had notified authorities about 30 per cent of the fish held at its offshore facility had died, submitting samples to the Department of Fisheries for clinical investigation.

While complete results from the study were not yet available, Mr Mitton told *TheWest* it was evident that the deaths were due to “opportunistic bacterial pathogens in the intestines of the fish”.

“This syndrome can be initiated by a variety of factors that are routinely associated with farming practices,” he said.

“These factors compromise the animals’ health and can predispose them to the kinds of infection currently being experienced.” <

TheFishSite News Desk