



<http://www.al.com/news/press-register/metro.ssf?/base/news/1225358168269330.xml&coll=3>

Gulf Council delays aquaculture vote during meeting in Mobile County

Proposal to allow open-water fish farm has raised concerns

Thursday, October 30, 2008

By KATHERINE SAYRE

Staff Reporter

Federal fishery regulators have delayed a vote on an aquaculture proposal that would open the Gulf of Mexico to fish farms — a plan that has drawn concern over the potential environmental impact of raising thousands of fish in under water cages.

The Gulf of Mexico Fishery Management Council will consider the aquaculture plan during a January meeting in Bay St. Louis, council officials said. The proposal would create a permitting process for developers to raise fish such as grouper and red drum in underwater cages and pens in federal waters stretching from three miles to 200 miles offshore.

Open-water aquaculture supporters have said raising fish in the ocean could take pressure off the overfished wild stocks in the Gulf.

But the plan has faced opposition from environmental groups and some commercial fishermen concerned about pollution from caged fish and other possible harmful effects. Some critics have also questioned the Gulf Council's legal authority to create aquaculture permits in the region.

U.S. Rep. Nick Rahall, D-W. Va., chairman of the House Committee on Natural Resources, in an Oct. 24 letter, called on the Gulf Council to halt its aquaculture plan which "runs directly counter" to efforts to establish a national aquaculture program "guided by strong environmental standards in all regions of federal waters."

"Perhaps of greater concern, it could establish a system that may not be consistent with or allowed under a national program that Congress enacts through legislation," Rahall wrote in the letter.

Bob Shipp, a Gulf Council member and head of marine sciences for the University of South Alabama, said the delay will allow the council to further explore environmental issues raised by fish farming in the Gulf. But the council's plan ultimately could be blocked by Congress, he said.

"The feeling is, let's move ahead with it and if Congress stops it, so be it," Shipp said, adding that the council's experience in developing an aquaculture plan and addressing the issues involved will provide useful information.

The plan, among many other rules, requires that cages are stocked with juvenile fish of only native species that are proved to be free of disease-causing pathogens. Shrimp are excluded from the plan. Applicants for an aquaculture permit would also need approval from the Environmental Protection Agency and the U.S. Army Corps of Engineers under the plan.

Proponents of aquaculture say raising fish in the Gulf could enhance recreational fishing opportunities and create new jobs in the seafood industry in the United States, where about 80 percent of consumed seafood is imported — about half of which is raised in aquaculture settings. But critics have called for more environmental safeguards in the plan.

During a public hearing on Wednesday, Margaret Curole with Commercial Fishermen of America, said industrialized aquaculture in other countries such as Chile, Thailand and Vietnam have lead to environmental and health disasters, including the outbreak of disease among fish.

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"Look to the countries that have already adopted this plan and see the problems they have and why it doesn't work out," Curole said.

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<http://www.sciencealert.com.au/news/20082710-18349-2.html>



Vaccine may save Australia's prawns

Monday, 27 October 2008

James Cook University



Kathy La Fauce and the cricket that helped her to develop the vaccine.

Researchers at James Cook University have developed a virus 'silencing' technique that could save the Australian prawn industry from millions of dollars in losses.

PhD student Kathy La Fauce has spent three years investigating how to reduce the spread of a virus which is robbing Australian aquaculture farms of their prawns.

Penaeus merguensis densovirus (PmergDENV) is the Australian strain of hepatopancreatic parvovirus, which stunts the growth of prawns, leaving them vulnerable to other infections, and often results in death.

Currently prawns cannot be vaccinated against any virus, so if a pond is infected the farmer has to put up with the losses, dry out the pond and re-stock.

Through RNA interference – a gene ‘silencing’ mechanism that occurs naturally in plants and animals – Kathy has been able to identify the virus genes responsible for the replication of PmergDNV within an animal and, thanks to an orchestra of crickets, has developed a method to reduce its ability to replicate.

“Prawns carry other viruses which affect the results of my experiment so we moved to insects as a model because of their identical biosynthetic machinery,” said Kathy. “Densoviruses are also known to occur in crickets so they were the obvious choice.”

By cloning a sequence of the replicating gene of PmergDNV and injecting it into a cricket, Kathy has been able to protect it against future infections with the live virus.

“The copied sequence binds to the same sequence in the live virus and the infected animal’s enzymes destroy it, which stops or ‘silences’ gene expression and prevents the animal suffering any of the affects of the virus,” she said.

The technique could have massive implications not only for the Australian aquaculture industry but for the international industry.

“We knew this virus was in farms but didn’t know what impact it was having on prawns so we scanned 190 ponds – 28.5 thousand larvae – between 2007 and 2008. We estimated that by reducing the levels of PmergDNV using this new technique, productivity could increase by at least 14 per cent. The Queensland industry makes \$46.5million each year, so that’s an increase of \$6.5 million if farmers are growing susceptible species.”

The next step is to work out how to deliver the sequenced PmergDNV gene into thousands of prawns at a time.

“We think we can grow it in bacteria, put it into food and let it reproduce thousands of times over – that way, the prawns will eat the food and at the same time ingest the sequenced gene,” said Kathy.

<http://www.thewest.com.au/default.aspx?MenuID=77&ContentID=104484>

thewest.com.au The West Australian

Fremantle brothers build an octopuses’ garden in the waves

25th October 2008, 8:00 WST

Growing worldwide demand for octopus has led a Fremantle company to turn to aquaculture to farm the delicacy in an Australian-first venture.

The Department of Fisheries has granted Occoculture Pty Ltd an aquaculture licence for a 10ha site off the north-east of Garden Island, where the company plans to grow each octopus to size for restaurants and for an existing market for the marinated product.

After successful trials over 18 months and consultation with marine experts and octopus fishermen in Europe, brothers and business partners Craig and Ross Cammilleri said they would begin the farming trial at the end of November and expect to harvest up to eight tonnes in their first three months.

The Cammilleris’ existing company, Fremantle Octopus, has been operating for eight years and Craig said they had been forced to buy octopus from cray fishermen to meet demand.

He said that after initially growing baby octopus in a home tank and later carrying out trials at Rous

Head and with one sea cage, the Garden Island operation will begin with 48 sea cages.

"We took a baby octopus home to show the kids in the tank . . . and we noticed the extraordinary growth rate of that octopus within the tank and how it would just take the food all the time, so we thought this is half a chance," he said.

The company, which sells to WA, South Australian, Queensland and Victorian markets, expects to go from producing 120 tonnes of marinated octopus this year to more than 300 tonnes a year when the aquaculture farm is fully operational.

"There's a huge untapped market across the world but we haven't been able to catch enough octopus to fulfil what we're doing here let alone export it," Craig said.

BEATRICE THOMAS

<http://www.ipsnews.net/news.asp?idnews=44448>

ARGENTINA: Caution and Enthusiasm for Fish Farming

By **Marcela Valente***

BUENOS AIRES, Oct 25 (Tierramérica) - Fish farming is expanding in Latin America, fuelled by the demands of a global market that is facing the stagnation of commercial fishing. But some people are warning about the limits of industrial production of fish and the environmental and social risks.

According to the United Nations Food and Agriculture Organisation (FAO), 45 percent of the fish consumed in the world comes from fish farms. Today that means 48 million tonnes, but by 2030 that volume would have to be doubled because of the decline in commercial fishing and the increasing demands of a growing population.



Fish farms out at sea.

Credit:Photo Stock

In Mexico, aquaculture dates back to the pre-Hispanic era. Historians say that several species were raised in ponds and that the Maya Indians controlled fish reproduction in natural pools known as "cenotes".

Currently, fish farms in Brazil, Colombia, Chile, Ecuador, Mexico and Peru produce volumes that are the envy of Argentine producers. But in Argentina, the continent's southernmost country, the climate and topographic conditions are not conducive to developing large-scale fish farming, say some experts and activists.

Environmentalists here point out that the social and environmental harm that can arise from aquaculture do not justify industrial-level promotion, and recommend instead fomenting responsible fishing in seas and rivers that still have a rich biodiversity.

With an output of 710,000 tonnes annually, Chile is the region's leading aquaculture producer and one of the top 10 in the world, alongside China and India. It is also the world's second leading producer of farmed salmon and trout (both of the Salmonidae family), after Norway. But the sector is not without its risks.

In 2007, the outbreak of infectious anaemia in salmon closed down many fish farms in Chile. One thousand of 55,000 jobs were lost, according to the government, though the unions say the layoffs affected 3,000 workers.

Argentina has its potential, "but it is not Chile or Brazil," Laura Luchini, national director of aquaculture, told Tierramérica.

"Some provincial governments are promoting this sector, but our job is to make sure people keep their feet on the ground," she said.

Along Chile's long, southern Pacific coast, there are many fjords, making it "very favourable for this activity," said Luchini.

In contrast, Argentina's southern Atlantic coastline does not have any fjords, which provide protection, except in Tierra del Fuego, the country's southern-most province, where mussels are farmed.

Fish farming in this country is being developed on a small scale, with trout, Patagonian flounder and mussels. But production amounts to no more than 3,000 tonnes per year -- an insignificant volume when compared to fishing, which produces between 850,000 and 1.1 million tonnes of fish and shellfish.

"Nor can our country compare to Brazil, which has tropical waters," said Luchini. South America's giant produces 250,000 tonnes annually of fish and shrimp in freshwater and on its Atlantic coast, in an inlet near the southeastern city of Florianópolis.

The aquaculture official believes that the enthusiasm of Argentine producers, who see enormous potential in fish farming, is a response to the pace of the sector's growth worldwide. "While fishing production has slowed and beef production is growing at a rate of 2.5 percent, aquaculture has grown 8.5 percent annually for the last eight years," she said.

Aquaculture has become a booming activity due to the higher global demand for food and the possibility of tracing the history, location and path of a product along the entire supply chain.

By 2045, FAO estimates that fishing and fish farm production will become homologous. Producers in Argentina believe that with credits, subsidies and better technology, they will be able to make the most of the opportunity to do good business, said Luchini.

But there are no magic solutions. Claudio Baigún, a biologist who is an expert in freshwater fish resources, agrees that the expectations of the producers do not take into account Argentina's limitations.

"They take Chile or Brazil as a guide, but Argentina is different. There are projects to raise pacú (*Piaractus mesopotamicus*) in Rosario (in the eastern province of Santa Fe). But while in Bolivia or Brazil, with their warm waters, the species matures in eight months, in Argentina it takes 18," Baigún told *Tierramérica*.

"Argentina is at the limit in South America for raising warm water species," he added. In any case, he warned that aquaculture is not a panacea. There are fish diseases, high costs of energy and fish food, and also the risks associated with the lack of genetic variation among the fish raised in pools.

"We want to believe that fish farming will resolve everything, but we have to preserve what we have, promote responsible management of the fish stocks and not believe that aquaculture is a life-preserver that's going to save us," said Baigún, a researcher at the Technological Institute of Chascomús.

From the environmental perspective, Jorge Cappato, director of the Proteger (Protect) Foundation, maintains that it is essential to differentiate between community and industrial aquaculture, because the latter could have greater negative social and ecological impacts.

In a conversation with *Tierramérica*, Cappato, whose foundation works to preserve biodiversity and promote sustainable fishing, remarked that "the chemical products used in fish farming -- antibiotics, pesticides, fertilisers -- have negative effects on the water.

"Local communities of artisanal fisherfolk then lose access to sufficient fish stocks and run the risk of being turned into fish farmers," he added.

Colombia produces 70,000 tonnes of farmed fish per year, according to 2006 data from the Colombian Agriculture Institute. With the disappearance of the "bocachico" (*Prochilodus magdalenae*), the principal freshwater fish species, local small-scale fishermen were turned into fish farmers, Cappato said.

"They earn less, are poorer and have less nutritious diets," said the Argentine foundation director, who visited the fish-raising ponds along the Sinú River, in the northern Colombian department (province) of Córdoba.

Cappato also mentioned the case of Ecuador, where the intensive production of lobster has been promoted in coastal areas of mangrove forests. The companies "destroyed 60 percent of the mangroves, left jobless the women who caught shrimp, and when a virus appeared they left, leaving behind empty concrete tanks."

The destruction of mangroves is also a problem in Mexico, which in 2007 produced 261,000 tonnes of farmed seafood, with shrimp in first place.

The shrimp industry is responsible for a large part of the disappearance of these important ecosystems, according to the Mangrove Ecology Group. In 2007, according to an official inventory, there was a 27 percent decline of mangrove forests since 2000 along Mexico's Pacific, Gulf and Caribbean coastlines.

(*This story was originally published by Latin American newspapers that are part of the Tierramérica network. Tierramérica is a specialised news service produced by IPS with the backing of the United Nations Development Programme, United Nations Environment Programme and the World Bank.) (END/2008)

<http://www.patagoniatimes.cl/content/view/671/1/>



IMAGE PROBLEM HAUNTS CHILE'S SALMON INDUSTRY



Written by Benjamin Witte

Thursday, 23 October 2008



Chile is the world's second leading farmed salmon producer

Environmental Groups Demand Tighter Control By U.S. FDA

As if disease and parasite woes, widespread layoffs and an expected 2009 double-digit production drop weren't bad enough, Chile's farmed salmon industry – long lambasted by environmental and labor groups – also faces some serious image problems.

In Chile, the once-booming industry's long list of opponents continues to grow and includes environmental groups, union leaders, artisan fishing organizations, tourism operators and some legislators. Industry critics say its rapid expansion over the past 20 years, while providing thousands of jobs, has come at the expense of the environment and workers' rights.

This past January the influential Santiago-based NGOs Fundación Terram and Oxfam Chile began highlighting the industry's questionable labor and environmental practices through a campaign called "Not Afraid To Go Against The Current" (PT, Jan. 15, Sept. 2). A separate campaign has emerged in recent months over the industry's planned expansion into Patagonia (PT, Sept. 23). The numerous organizations involved in the latter – dubbed the "moratorium" movement – are calling on Chilean authorities to cease issuing concessions to companies planning to set up shop in the country's far southern Aysén and Magallanes Regions.

But critics of the US\$2.2 billion industry can be found outside of Chile. This past March the New York Times (NYT) ran an article entitled “Salmon Virus Indicts Chile’s Fishing Methods.” The article raised serious questions about Chilean aquaculture practices, suggesting among other things that producers here overuse antibiotics (PT, April 1). A report filed in 2007 by the international environmental group Oceana made similar claims, suggesting that Chilean producers use up to 300 times more antibiotics per ton of salmon than their Norwegian counterparts. Chile and Norway are the world’s top two salmon farming countries, together accounting for roughly 80 percent of global production.

“The word antibiotic means anti life,” said Michael Hirschfield, Oceana’s chief scientist. “Antibiotics are designed to kill bacteria. However, no antibiotic is perfect. One of the frightening aspects of overuse of antibiotics in Chile is the potential widespread development of resistant bacteria in the vicinity of salmon pens spreading elsewhere. The world simply does not need anymore resistant bacteria.”

Just days after the NYT story went to print, Safeway, one of the United States’ largest food retailers, announced it would suspend purchases of Chilean salmon. The United States buys an estimated 38 percent of all Chile-raised salmon, purchasing approximately US\$700 million worth annually. Safeway – which buys its product from industry leader Marine Harvest – spends only about US\$12 million on Chilean salmon, a relatively small amount. Still, the move rattled Chilean producers, who feared it could set a costly precedent, especially if U.S. chains Wal-Mart or Costco were to follow suit.

“(The NYT article) received a lot of attention and received a pretty strong reaction from the salmon industry,” said Gerald Leape of the Washington D.C.-based Pew Environment Group. Leape heads the organization’s Salmon Aquaculture Reform Campaign.

While the uproar over the NYT article has since settled down, general concern over Chilean fish farming practices has not – especially given that just last week German health authorities detected banned chemicals (crystal violet and abamectina) in samples of Chilean farmed salmon (PT, Oct. 21).

This week, Michael Hirschfield and other participants in an international effort named the Pure Salmon Campaign (PSC) called on the U.S. Food and Drug Administration (FDA) to tighten controls on salmon imported from Chile and elsewhere.

“In those countries where their FDAs are testing, they are finding results. So what we need to do is strengthen our efforts and urge the U.S. FDA to strengthen its testing to help protect consumers,” said Gerald Leape of the Washington D.C.-based Pew Environment Group, a key PSC member. Leape heads the Pew Group’s Salmon Aquaculture Reform Campaign.

According to former FDA official William Hubbard, the government health agency inspects less than 1 percent of the 13 million food shipments sent every year to the United States. There are currently 30,000 seafood providers registered with the FDA. Half of those are located outside the U.S. Despite the huge numbers, the FDA has just 50 seafood inspectors who can, on average, only make about 60 foreign inspections per year, Hubbard explained.

“Despite the fact that the FDA has often found seafood contaminated by illegal drugs, filth and other problems, the program has not been strengthened in recent years and in my view is getting weaker,” he said.

“We have a program that is grossly under-funded and incapable of visiting the foreign producers to make sure they’re following safe seafood processing practices,” Hubbard added. “When the seafood does arrive here the FDA is incapable of testing it, sampling it, inspecting it, so therefore most of the seafood is coming into the country unchecked by the FDA.”

Tighter FDA controls would not only go a long way toward protecting U.S. consumers but would also, PSC members believe, force producer countries like Chile to clean up their act.

"We're trying to get the word out quite broadly that the United States, one of the biggest importers of Chilean salmon, is watching and paying attention and that we expect the Chilean government to act," Hirschfield told the Patagonia Times.

By Benjamin Witte (patagoniatimes@gmail.com)

<http://www.abc.net.au/news/stories/2008/10/21/2397240.htm>

Farm hopes to harvest kingfish next year

Posted Tue Oct 21, 2008 3:13pm AEDT

A Jurien Bay aquaculture farm, south of Geraldton, is hoping to harvest its first batch of kingfish by early next year.

Western Kingfish began farming at its hatchery in July this year and says the first batch of yellow tail kingfish are now spawning.

The company's general manager, Herb Mitton, says conditions in coming months are looking favourable and he is confident harvest can take place by March.

Mr Mitton says farmed seafood is helping sustain fish stocks.

"Wild capture numbers are depleting on an annual basis and what's happening in terms of the aquaculture contribution is that in 2006, there were 47 per cent of total seafood consumed was actually aquaculture grown," he said.

<http://www.canada.com/nanaimodailynews/story.html?id=3c49d081-1229-4597-b79e-4a1a74af535b>

Nanaimo Daily News.

Impact of Slice still unknown

Walter Cordery, The Daily News

Published: Tuesday, October 21, 2008

Wow. The number of sea lice in the Broughton Archipelago are dwindling.

Salmon smolts may no longer be threatened by the lice, which seem to multiply exponentially wherever salmon farms are located. Critics of fish farms have long associated sea lice with the decrease in pink salmon stocks in the archipelago.

The B.C. government recently released its 2007 Fish Health Report, which concluded sea lice counts at the province's approximately 130 salmon fish farms are at their lowest level since the inception of the ministry of lands and agriculture's monitoring program which began in 2003. So sea lice has been a problem around aquaculture facilities for decades in places like Ireland and Scotland and we started monitoring them in 2003. I have to admit I found it humorous to see Nanaimo-Parksville Liberal MLA and vice-chairman of the province's sustainable aquaculture committee Ron Cantelon pointing to the decrease in sea lice as proof that critics like Alexandra Morton don't know what they are talking about.

Morton and others conclude sea lice infestations caused by the farms are driving populations of wild salmon to extinction. Recently Morton argued before the Supreme Court that fish farms should be under the jurisdiction of the department of fisheries and oceans and not the responsibility of the province. She is, of course, correct as one of the Department of Fisheries and Oceans mandates is the protection of wild salmon.

However, what seems to be missing in both sides of this argument is the introduction of Slice into the waters around fish farms.

B.C. is the world's fourth-largest farmed salmon producer, worth almost \$405 million in 2007 and employing about 3,000 workers, but the operations have a history of sea lice infestations that biologists like Morton claim is spreading to nearby native populations, decimating their numbers.

OK, does anybody but me think that one of the reasons sea lice numbers are dwindling in the Broughton Archipelago is the introduction of Slice?

Recently, I asked Cantelon if the aquaculture industry is still using Slice to combat sea lice infestations. Slice is the commercial name for emamectin benzoate.

According to Farmed and Dangerous' website, "To date, Slice has: Not been tested for food safety by the Canadian Food Inspection Agency;

Not been licensed by the Bureau of Veterinary Drugs (Health Canada); and

Not been permitted for use through the Pesticide Control Act.

Yet, this is the only agent used to control sea lice in B.C. Salmon farmers are approved to use Slice through the emergency drug release program, which allows the use of non-approved drugs when recommended by veterinarians for emergency situations."

Farmed and Dangerous says that "outbreaks of sea lice are so prevalent in industrial net-pens that the use of Slice has become standard operating procedure."

In 2003 alone, 37 million farmed salmon in Canada were treated with this chemical, with little or no regard for other sea creatures who may be affected by it.

Does anybody think it strange that when communities like Nanaimo are considering a pesticide ban for artificially manicured lawns that we allow an untested chemical to be used in the ocean to protect farmed salmon? We don't know if salmon treated with Slice are safe to eat. We don't know the impact it has on other species. And we worry about the impact of pesticides on our lawns and gardens.

Walter Cordery's column appears regularly in this space.

To comment, send an e-mail to:

letters@nanaimodailynews.com




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<http://www.theaustralian.news.com.au/business/story/0,28124,24512584-5017996,00.html>

Woolies, Coles support unit pricing for food

Blair Speedy | *October 18, 2008*

MAJOR supermarket chains have declared their support for a mandatory unit pricing code for food.

Smaller retailers have meanwhile urged the Government to delay its introduction until economic conditions have improved.

In submissions to a federal government review on the best way to implement unit pricing, fruit and vegetable and seafood industry groups also argued for the retention of pricing per item for goods traditionally sold by number rather than weight, such as lettuces and oysters.

The introduction of unit pricing, under which the price of goods is displayed according to standard measures such as per 100g or litre, was a key recommendation to come out of the competition regulator's inquiry into grocery pricing earlier this year.

Both Coles and Woolworths declared their support for unit pricing, while discount grocery chain Aldi and NSW regional supermarket chain Franklins have already moved to implement their own forms of unit pricing.

"Coles supports the introduction of unit pricing and believes unit pricing will benefit customers wishing to compare prices between pack sizes and brands," the Wesfarmers-owned supermarket chain said in its submission.

Woolworths also said it supported the introduction of unit pricing provided it was consistent nationwide and did not impose conditions that would require significant investment, such as installation of new labelling systems.

The Queensland Government last month released draft legislation for a statewide unit pricing system, panicking major retailers, which feared they might be forced to bear the cost of complying with multiple conflicting regimes.

However, the Australian Retailers Association, which represents more than 5000 smaller retail businesses, said the introduction of a new pricing system would place added compliance costs on businesses at a time when they could least afford it.

"During one of the hardest economic times for retailers, decision-makers are continuing to push through legislation across the country, including unit pricing, plastic bag bans, emissions trading schemes, parental leave, award modernisation and tobacco control -- ensuring additional burdens to retailers," said ARA executive director Richard Evans.

Grocery wholesaler Metcash, which supplies the IGA chain of independently owned supermarkets, said unit pricing would cost its customers \$10 million to implement and should only be adopted on a voluntary basis.

Meanwhile, Queensland horticulture industry body Growcom said forcing retailers to advertise foods that were traditionally sold by number "could result in unnecessary ramifications".

Fishing industry body Seafood Access Forum said its members should be allowed to continue selling oysters by the dozen.

<http://www.saudigazette.com.sa/index.cfm?method=home.regcon&contentID=2008101719361>

NPC to showcase \$700m desert aquaculture farm

By Saudi Gazette Staff



JEDDAH - National Prawn Company (NPC), a global leader in environmentally friendly aquaculture farming, has announced that it will be showcasing the world's largest fully integrated desert aquaculture farm valued at \$700 million at "Sea Food Expo 2008", the region's only dedicated seafood event, which is slated on Oct. 27-29 at the Madinat Arena Conference Hall in Madinat Jumeirah Hotel, Dubai.

The participation is in line with company's aims to expand its regional market share and strengthen its leadership as the largest fully-integrated "stand alone" prawn farm in the world. Additionally, NPC also aims to enhance its white prawn production, with the company aiming to raise its output to over 45,000 tons annually by 2010 from its current annual production of 15,000 tons. NPC is situated south of Jeddah and boasts of leading-edge technologies that adheres to sustainability and high quality aquaculture farming standards.

With a 3,000-strong workforce, the company maintains a completely self-sufficient farming operation - from power and water through to pond, plant and infrastructure construction. Company officials have revealed that NPC's strong presence at the "Sea Food Expo 2008" for the second year in a row is part of their aims to leverage the aquaculture and fisheries market, which is projected to exceed 123 million tons by 2009.

"We are witnessing growing demands for our main products as supreme quality, texture, color and a uniquely brilliant taste are what makes our prawns one of the most sought after by chefs and food professionals throughout the world, and we are once again proud to take part in such a high profile event such as Sea Food Expo 2008," said Mohamed Gamal Zaki, Marketing Support manager, National Prawn Co. "Our presence at the event will be marked by our world-renowned white prawns, which we distribute to over 30 countries. Further, we have high expectations that this will spill over to our expansion into fish aquaculture, which we will be undertaking very soon."

In addition to its products' outstanding taste and visual appeal, NPC also takes pride in offering buyers and consumers the confidence that they are purchasing a fully sustainable food product.

<http://www.scoop.co.nz/stories/PA0810/S00422.htm>



NZ's largest offshore marine farm approved

Friday, 17 October 2008, 4:46 pm

Press Release: New Zealand Government

Hon Jim Anderton
Minister of Fisheries
Hon Steve Chadwick
Minister of Conservation

17 October 2008
Media statement

New Zealand's largest offshore marine farm approved

Fisheries Minister Jim Anderton and Conservation Minister Steve Chadwick said the largest marine farm in New Zealand could have the potential to provide 500 new jobs.

The ministers today announced that Eastern Seafarms Ltd has received final approval for the staged development of 3,800 hectares of marine farming space 8.5km offshore of Opotiki for mussel farming and spat catching.

"The development of this large marine farm will boost the Bay of Plenty regional economy, especially in the Opotiki area, bringing jobs and investment both in the construction of the farm and its ongoing operation," Jim Anderton said.

The Whakatohea Maori Trust Board is the majority shareholder (54%) in the farm along with Sealord Shellfish Ltd and NZ Seafarms Ltd.

"The development of this venture has the potential to bring large benefits to local Maori, both in their majority ownership and also through increased employment and career opportunities," said Steve Chadwick.

"This farm will offer excellent opportunities to undertake further research and development into offshore marine farming, which is still in its early stages in New Zealand," said Jim Anderton.

"Off shore marine farming has huge potential for the future growth of New Zealand's aquaculture industry. Recent trials have proved very promising and I am excited about the potential of this farm for offshore marine farming elsewhere," he said.

This new farm will be developed in stages over the coming years. The permits initially allow for 8 "blocks", equating to 256 longlines over 1,600 hectares to be developed. There is a requirement in the farm's resource consent for monitoring in between each stage being developed. This monitoring will check for adverse impacts on the seafloor, water column, marine mammals and fish stocks in the area.

"The staged development and ongoing monitoring will allow for sustainable aquaculture development in the Bay of Plenty while ensuring the environment isn't compromised," said Steve Chadwick.

"If any adverse effects are detected the development will cease and monitoring will continue," she said.

Eastern Seafarms Ltd lodged their application before the national aquaculture moratorium in November 2001 and the Aquaculture Reform Legislation that was introduced in 2004. As a result, it was processed under the old legislation which required consents under the Resource Management Act 1991 and the Fisheries Act 1983.

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BACKGROUND

The application required several stages of approval before it could commence operation. This included Resource Management Act approval from the Bay of Plenty Regional Council, and the Minister of Conservation. Approvals were granted in 2002 but subsequently appealed to the Environment Court.

It also required a marine farming and spat catching permit under the Fisheries Act 1983 from the Ministry of Fisheries Chief Executive. An approval for 3,800 hectares was provisionally granted in December 2006.

Following the Chief Executive's decision, the parties who had appealed the application were able to resolve their issues and negotiate agreements to submit to the Environment Court. The Environment Court upheld the regional council's decision and recommendation to the Minister of Conservation on 15 September 2008.

Final approval of the proposal was required from the Minister of Conservation because of the large size of the proposed farm. Under the Coastal Policy Statement, any proposal involving an area greater than 50 hectares is considered to restrict public access and is classified as a restricted coastal activity, which requires approval by the minister. Minister Steve Chadwick approved the application on 8 October 2008.

Approval of the RMA consents then allowed the Ministry of Fisheries Chief Executive to issue the marine farming and spat catching permit, subject to the conditions identified in his assessment undertaken in 2006 and by the Environment Court.

Because of the newness and uncertainties around large scale offshore marine farming, all the regulatory authorities involved and the Environment Court recommended staged development with adaptive management.

Who are Eastern Seafarms?

Eastern Seafarms Limited are a joint partnership between local iwi and a number of other seafood companies. The Wakatohea Maori Trust Board holds 54% of the shares, Sealord Shellfish Limited holds 26% of the shares, and NZ Seafarms Limited holds 20% of the shares.

Are there any other large offshore marine farms around New Zealand?

This is the third large offshore marine farm to be approved under the RMA and the second to be granted permits under the Fisheries Act. At 3800ha it is, however, the largest. The other two include a farm owned by Napier Mussels limited of 2469 ha off the coast of Napier, and Pegasus Bay, which still requires a marine farming permit, of 2695 ha (this one is on the outer limits of the coastal marine area, approximately 12 nautical miles offshore).

Is offshore marine farming viable?

Although offshore aquaculture is economically unproven to date, several aquaculture industry players believe it is likely to become economic in the near future. Research trials conducted in Hawke Bay and Bay of Plenty on the offshore farming of a number of species are proving promising.

The applicants for Eastern Seafarms are keen to begin development of this site. This farm has the potential to lead the way for offshore marine farming elsewhere

Government is working in partnership with Aquaculture New Zealand to help facilitate continued research into offshore aquaculture and making it commercially viable.

How will the staged development and adaptive management work?

The marine farm will be developed in five stages with monitoring and adaptive management, according to the conditions on the structures permit, as follows:

Stage Number of Blocks Maximum number of lines

1A 1 5

1 8 256

2 16 504

3 16 704

4 16 984

Stage 1 cannot occur until there has been a baseline seafloor survey undertaken at 30 sites across the full 3800 hectares. The development of each of the subsequent stages, 2, 3 and 4, will not occur until at least three years of monitoring by a party approved by Environment Bay of Plenty has been undertaken. The monitoring reports must confirm that the development is not having a significant adverse effect on the water column, seafloor environment or marine mammals. If the monitoring has not been undertaken satisfactorily or a significant adverse effect on any one of those three matters is shown in the monitoring, then development of the farm cannot proceed to the next stage and monitoring will continue. The permit holder must take any steps recommended in the monitoring reports as directed by the council.

<http://moruya.yourguide.com.au/news/local/news/general/the-heat-is-on-our-oysters/1334449.aspx>



The heat is on our oysters

BY KERRI-ANNE MESNER

15/10/2008 1:47:00 PM



WATER MONITORING: Clyde River oyster farmer Kevin McAsh checks the pH levels of the Clyde.

MORE research needs to be done before local oyster growers can ascertain the level of risk climate change poses to the lucrative industry.

Recent reports have claimed warming waters have the potential to devastate the Clyde River oyster industry but growers say more data needs to be collected before the potential impact can be properly assessed.

The oyster industry earned \$3.9 million in the 2006/07 financial year, according to the Department of Primary Industries' Aquaculture Production Report.

Recent media reports about CSIRO study - Implications of Climate Change for Australian Fisheries and Aquaculture - have said the Sydney rock oyster industry would be at risk over the next few decades.

The CSIRO report said south-east fisheries were most likely to be affected by changes in water temperature as the climate gets warmer.

Clyde River Oyster Farmers spokesman Kevin McAsh said none of the farmers knew what climate change would mean for their farming future.

He said there had been no

environmental data collected until recently, and the data being collected now was just pH and salinity levels.

Mr McAsh said a weather

station needed to be built between Pelican Island and Chinamans Point to collect data to be shared with other industry groups.

He said a weather station would help determine future weather patterns and climate conditions. This would narrow down which climate change conditions the Clyde River industry could face.

He said preliminary climate change information suggested the Clyde River industry would not be as badly affected as the North Coast industry. But, if North Coast waters warmed too fast, it would affect mortality rates of juvenile oysters, which about six Clyde River farmers buy to grow until market size.

He said other local farmers

collected juvenile oysters from nearby coastal waters.

Warmer water changes the pH levels (acidic or alkaline), which affects oysters' lives.

Fisheries expert Ana Rubio said if pH levels changed quickly, oysters may not be able to produce shells.

"That would have a major impact," she said.

Ms Rubio said scientists have not been able to predict exactly what conditions are going to happen as a result of climate change or even how fast those changes would occur. She anticipates pH levels will drop slowly, which would allow oysters time to adapt to the new conditions.

http://weblogs.baltimoresun.com/news/local/bay_environment/blog/2008/10/asian_oysters_a_health_threat.html



Asian oysters revisited: a health threat?

Asian oysters may be able to repopulate and help clean up the Chesapeake Bay, but does that mean you'd want to eat them? There are questions about whether the fast-growing imports would be more likely than the now-depleted native oysters to pick up and pass along human disease pathogens or viruses.

Researchers at Johns Hopkins' Bloomberg School of Public Health have found that *Crassostrea ariakensis*, aka the Asian or Suminoe oyster, collected and retained viruses that cause gastro-intestinal illness in humans, such as norovirus and hepatitis A. Their findings were published in last month's [Applied and Environmental Microbiology](#). The Johns Hopkins student newspaper, the [News-Letter](#), featured the study last week, after I reported on the findings of a draft Environmental Impact Statement studying Asian oysters as a possible remedy to the decimation of the bay's native oysters.



A couple years ago, the same researchers found that Asian oysters were more likely to pick up and accumulate spores of *Cryptosporidium*, a water-borne microorganism that also can cause gastro-intestinal illness in humans. That study was published in 2006 in [Applied and Environmental Microbiology](#).

The oysters tested by researchers had been chemically sterilized, so they grew faster than reproducing oysters. Such sterile, or triploid, oysters are being considered for use by private aquaculture operations in Virginia and Maryland because they can reach market size in a year or less, compared with three years for wild-growing native oysters.

Oysters of all types have long been recognized as a health threat when eaten raw because of their tendency to collect pathogens from contaminated water. It's believed that the Asian oyster may pick up more pathogens than the bay's native Eastern oyster, *Crassostrea virginica*, perhaps because it filters more water to feed its faster growth.

That doesn't mean the imported oyster is a health threat in and of itself. The Hopkins scientists note that the risk comes from eating oysters taken from polluted water. Authorities in Maryland and other states attempt to protect the consuming public from water-borne illnesses by testing and closing oyster beds in waters contaminated with animal or human waste, the most likely sources of the disease-causing organisms. Oysters grown in private aquaculture operations presumably would be subject to more scrutiny than those harvested from the wild.

Still, the draft Environmental Impact Statement looking at putting Asian oysters in the bay - due to be officially released this week - does acknowledge the potential risk. The report's [executive summary](#) notes that "Suminoe oysters may bioconcentrate contaminants to greater levels than Eastern oysters."

Follow the link above to see all the pros and cons to restoring the bay's oysters that are being weighed by the U.S. Army Corps of Engineers, Maryland and Virginia.

(Maryland Sea Grant College photo)

<http://www.abc.net.au/news/stories/2008/10/13/2389413.htm?site=riverland>

Greens back polluter identification plan

Posted October 13, 2008 13:49:00

Updated October 13, 2008 14:20:00



Concern about aquaculture pollution (file photo) (user submitted: Des Woolford)

The South Australian Greens are supporting a proposal to identify polluters in the aquaculture industry.

Recreational fishing crews are proposing that materials such as rope be marked, so polluting companies can be identified.

The Department of Primary Industries has rejected the proposal, but says it will act to enforce self-regulation through education and peer pressure.

Greens MP Mark Parnell says it is a multi-million-dollar industry that has had plenty of time to clean up its act and it should pay to introduce a new system.

"Whether that means that every bit of rope or gear has to have a special marking, well so be it," he said.

"Clearly the industry is not regulating itself, the Government needs to step in, primary industries needs to step in because it's unacceptable to have tonnes of rubbish just washing up on the beaches endangering wildlife because the aquaculture industry isn't capable of regulating itself."

<http://www.patagoniatimes.cl/content/view/664/1/>



SALMON: ISA WOES PROMPT DISMAL PRODUCTION FORECAST



Written by Patagonia Times Staff

Monday, 13 October 2008

Producers are forecasting difficult times ahead for Chile's once-booming farmed salmon industry, which continues to be pummeled by Infectious Salmon Anemia (ISA). A highly contagious virus, ISA can be deadly to fish but does not affect humans.

SalmonChile, the industry's private producers association, predicts that Chilean salmon production could fall by as much as 20 percent in 2008 – possibly to as low as 275,000 tons. In 2007, Chile – the world's second leading farmed salmon exporter – produced nearly 400,000 tons of salmon and reported export earnings of US\$2.247 billion.

The expected production drop is directly related to ongoing problems with ISA, which first appeared on Region X fish farms in mid 2007. Since then the disease has spread throughout the region and gained a strong foothold in Region XI as well. There has even been one confirmed ISA finding in Region XII.

Chile's National Fishing Service (SERNAPESCA) recently added eight new salmon farms to its ever expanding outbreak list, which currently names 22 sites. The government body cites 25 farms as "suspicious" and maintains an additional 78 sites under quarantine. SERNAPESCA, furthermore, lists 46 sites as "temporarily decommissioned" – a relatively new category used to describe formerly infected farms that have eliminated all fish, thoroughly disinfected all facilities and agreed to remain inoperative for three months.

Authorities estimate that ISA cost the industry approximately US\$30 million in the first six months of this year. Struggling companies have also slashed jobs, laying off upwards of 2,000 people.

"We've had many crises in the history of the industry. I'd say that this is one of them," said Carlos Odebret, SalmonChile's top Region X representative. "Every time we come across as new virus or bacteria in the water, it's difficult to control. Trying to control the water is like trying to control the air."

Still, there may be some good news on the horizon. A Chilean laboratory called Recalcine is reportedly in the testing phase of an ISA vaccine. The biological vaccine contains no antibiotics and – if proven to be effective – would be used as a preventative medicine for small, healthy fish.

By Patagonia Times Staff (patagoniatimes@gmail.com)

<http://www.abc.net.au/news/stories/2008/10/10/2387890.htm>

Education seen as key to stopping aquaculture pollution

Posted Fri Oct 10, 2008 3:47pm AEDT

South Australia's Primary Industries Department says it will act to curb aquaculture pollution in Spencer Gulf, but does not support a proposal to identify polluters.

Recreational fishers are proposing that aquaculture operators should have to mark materials such as rope so polluting companies can be identified.

But the state's executive director of aquaculture, Ian Nightingale, says education will be the key to turning around attitudes.

"I think it's much better to have, if you like, peer pressure to enforce that within operations, to have the right sort of procedures within companies' operating systems to make it work and importantly educate people that it's just not acceptable to have this kind of litter entering our marine environment," he said.