

AQUACULTURE STORIES

<http://www.news.com.au/adelaidenow/story/0,22606,24670840-5003680,00.html>

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Science key to aquaculture sector

Article from: **The Advertiser**

CHRISTOPHER RUSSELL

November 18, 2008 04:45pm



Coffin Bay oyster farmer Clayton Pentecost displays some of his farmed oysters - one example of the lucrative SA aquaculture ventures.

SCIENCE and a more adventurous Australian cuisine hold the keys for a boom in the state's aquaculture.

The products are diverse, but so are the fortunes, a tour last week of South Australia's aquaculture operations in southern Eyre Peninsula and Kangaroo Island made clear.

Foremost on the scientific front is the globally significant research being done by publicly listed company Clean Seas Tuna, business leaders on an SA Great regional tour discovered.

Clean Seas is seeking to breed southern bluefin tuna in captivity and last season produced live tuna larvae.

Clean Seas chairman Hagen Stehr said the broodstock tuna in the company's Arno Bay onshore tanks are pairing up at the moment.

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Marine scientists have manipulated light, temperature and currents in the tanks to mimic the migration route of the pelagic fish as they head for the breeding grounds of the Coral Sea.

Mr Stehr is optimistic this season will not only again produce larvae but his team will move toward keeping these alive for the first crucial days as they develop into fingerlings.

Working alongside staff for the first time will be researchers from Japan's Kinki University which signed a collaboration agreement with Clean Seas in September. Kinki have successfully bred northern bluefin tuna to saleable size.

"The finer things, the tricky things, they really know well," Mr Stehr said.

Mr Stehr hinted that raising the capital needed to take full advantage of the company's opportunities might mean the family relinquish its status as majority stake holder.

"I would like to keep control of the company but in the end that might not be possible," he said.

"We've got quite a number of companies that are very keen to take the next step with us. The main thing really is that we be successful."

Fellow Port Lincoln company Kinkawooka Shellfish researched globally before beginning a mussel farm in Boston Bay.

Managing director Andrew Puglisi said his family had been pioneers in the prawn and tuna industries before he decided to try something new.

"As it turned out, it was even more adventurous than the first two," he said.

Mr Puglisi hopes that Kinkawooka's advanced packaging technique - which seals water in the bag to prolong shelf-life - and marketing campaigns will help build the domestic market.

Australians consumed an average of only 120g a year of mussels compared to New Zealanders who got through 2kg to 4kg and the French and Spanish who ate about 8kg.

"So there's a huge amount of growth potential in the Australian market which hopefully comes on sooner rather than later," he said. At nearby Coffin Bay, oyster leases fatten up stocks in the strong ocean currents.

Bay manager of Aqa Oysters Rob Swincer said the company is producing about 400,000 oysters a year from its Coffin Bay leases.

On Kangaroo Island's Smith Bay, KI Abalone is rebuilding, the company, which was in administration, under control of new owner Geoffrey Rischbieth since July.

It expects to produce 70 tonnes this year and 110 tonnes in 2009.

<http://www.news.com.au/adelaidenow/story/0,22606,24669388-5003680,00.html>



SA aquaculture firm Clean Seas signs trial deal with Intermarche

Article from: **The Advertiser**

RUSSELL EMMERSON

November 18, 2008 12:45pm

SOUTH Australian aquaculture company Clean Seas Tuna has signed a trial distribution agreement with French supermarket chain Intermarche.

Chairman Hagan Stehr, announcing the deal at today's annual general meeting in Adelaide, said the trial of two tonnes of Kingfish would be air-freighted to France this weekend - and in 250 shops - from early next week.

He said the trial was a key sales deal for the future of the company.

"This deal has taken us nine or 10 months, but in the end we have got there. If we are successful in this, (our sales) will be a lot higher by Christmas and after Christmas," he said.

"If you have Intermarche, you will get some of the others."

Clean Seas Tuna already has a distribution agreement with Sainsbury's in Britain, but a full agreement with Intermarche would take the product through the chain's 1500 French stores and 500 stores throughout Belgium, Portugal, Spain, Poland, Bosnia and Romania.

Responding to a shareholder question, Mr Stehr said a dividend was still two years away, and that the company was focusing on building its production capacity of both tuna and kingfish.

However, a plan for the company to acquire Stehr family interests in "catch and grow" products was still contingent on an independent review, board and shareholder approval of further capital raisings, he said.

Clean Seas shares were trading at 38.5c at 12.40 pm Adelaide time, the 3.8 per cent fall on opening outpacing the market's 1.2 per cent fall.

<http://www.sbpost.ie/post/pages/p/story.aspx-qqqt=IRELAND-qqqm=news-qqqid=37576-qqqx=1.asp>

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EU tackles government on weak EIA

16 November 2008

The European Court of Justice (ECJ) will deliver its judgment on Thursday in a case brought by the European Commission against the government for allegedly infringing the law on environmental impact assessments, writes Kieron Wood.

The commission claims that Ireland's implementation of the Environmental Impact Assessment (EIA) directive is deficient, because Ireland only requires EIAs to be carried out for large projects. The commission said the directive required other criteria to be taken into account, including "cumulation with other projects, location, the environmental sensitivity of the geographical area and the impact on landscapes of historical, cultural or archaeological significance".

The commission also complained about the lack of selection criteria applied to trial fish farms, as Irish legislation only requires an EIA to be carried out "if the agriculture

minister considers that the proposed aquaculture is likely to have significant effects on the environment”.

The commission has complained about Ireland’s failure to protect the Kenmare River and for failing to tackle discharges of toxic chemicals and waste from salmon farms.

Tony Lowes, director of Friends of the Irish Environment, said: “It is our hope that the forthcoming judgment will focus the authorities’ minds on the importance of assessing the impact of fish farming on the viability of wild salmon. The assessment of salmon farms on the wild stock has not been taken on board, in spite of repeated studies around the world and the government’s own high-level group on sea lice monitoring and control.”

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<http://www.thedaily.com.au/news/2008/nov/15/qld-save-salmon/>



Qld to save salmon

12:00a.m. 15th November 2008

| By Janine Hill



RESEARCH SUCCESS: Students Rebecca Morgan and Kelli Anderson are working with Professor Abigail Elizur at the University of the Sunshine Coast to help preserve the salmon industry.

Some fishy business is going on at the University of the Sunshine Coast, but it's all in the name of science.

A university team is involved in research to help climate-proof Tasmania's \$270 million dollar a year salmon industry.

In partnership with Griffith University and Salmon Enterprises of Tasmania, the USC researchers are looking at the impact of temperature changes on Atlantic salmon and how to improve the survival rate of eggs.

USC professor of aquaculture biotechnology, Abigail Elizur said Atlantic salmon, as an introduced species, were already living at the upper end of their temperature tolerance limits, and predictions of global warming would potentially threaten their survival.

Prof Elizur said warmer temperatures tended to weaken the salmon's eggs, causing soft shells which meant that their contents might not develop and hatch.

"When you look under the microscope, it's as if the egg is not formed correctly and there are holes in the egg which can lead to bacterial infection," she said.

Prof Elizur, assisted by PhD student Kelli Anderson and honours student Rebecca Morgan, said the research was examining the molecular structure of the eggs and the effects of genes and hormones on their quality.

"We're looking at two families of genes. The first is the gene code for the proteins that make the egg shell," Prof Elizur said.

"The other family are the genes which code for the hormones and that regulate their receptors, and what happens to the level of expression (as temperatures change)."

Prof Elizur said the research was comparing the changes in water temperatures of 8 to 14 degrees Celsius against temperatures of up to 22 degrees Celsius.

The professor, who admits to being partial to salmon cooked in cream and white wine with garlic and red peppercorns, said it would be a shame to see the Tasmanian salmon industry lost.

The molecular biology component of the research is being handled at the USC, while the physiological component is being done at Griffith University, and the work with live fish is taking place in Tasmania.

The research project has received \$100,000 in federal government funding from the fisheries research and development corporation.

http://www.fishupdate.com/news/fullstory.php/aid/11936/World_s_salmon_aquaculture_industry_leaders_meet_to_develop_standards.html

FISHupdate.com

World's salmon aquaculture industry leaders meet to develop standards

Published: 14 November, 2008

More than 80 of the world's salmon aquaculture industry stakeholders – including producers, NGO representatives, retailers, government representatives and scientists – met in Edinburgh this week to move forward with developing global standards for salmon aquaculture. The standards, when adopted, will help minimise or eliminate the salmon farming industry's key impacts on the environment and society.

It was the 12th meeting of the Salmon Aquaculture Dialogue since it was formed in 2004. The meetings over the past two years have primarily focused on the presentation and discussion of scientific reports about the various negative impacts related to salmon farming. Information from the reports, written by technical working groups, will be used in creating the standards.

Participants at this week's meeting confirmed the main guiding principles for addressing the impacts and offered helpful suggestions to make them more robust. The principles, which had been identified at previous meetings, include conserving natural habitat and local biodiversity, as well as protecting the health and genetic integrity of wild-caught salmon. The principles had been available for public comment for two months prior to being finalised.

Important input to the development of criteria – areas to focus on to assess each impact – also was provided. This input will be used to revise the draft criteria, which will then be posted on the Dialogue website for public comment.

Also at the meeting, participants began to brainstorm potential indicators, or what to measure in order to determine the extent of each impact. The principles, criteria and indicators will be the foundation for the final standards, which will be measurable, performance-based and created by an open and transparent process.

www.fishupdate.com is published by Special Publications. Special Publications also publish Fish Farmer, the Fish Industry Yearbook, the Scottish Seafood Processors Federation Diary, the Fish Farmer Handbook and a range of wallplanners.

<http://www.enterpriseneews.com/opinions/x1720653520/Editorial-Naturally-a-new-meaning-of-organic-smells-fishy>



Editorial: Naturally, a new meaning of organic smells fishy

Posted Nov 13, 2008 @ 10:02 PM

Consumers pay a premium for certified organic food items because they believe it is worth the extra money to buy products free of chemicals, pesticides, herbicides, dyes and other substances they'd rather not put into their bodies.

But a proposed federal regulation that would certify open-pen fish farms as organic could water down the meaning of the term as well as have a devastating effect on the already-reeling commercial fishing industry, especially in our region.

The National Organic Standards Board, a division of the U.S. Department of Agriculture, will hold its fall hearings in Washington beginning Monday and it is expected the board's Livestock Committee will make a favorable recommendation to allow open water aquaculture fish to carry the USDA Organic label.

The United States lags behind other countries in standardized organic regulations such as Israel, Australia and some European countries such as Norway. Here, the same mission that sets organic standards for fish uses the same base certification for cattle, lamb, and other land-locked livestock.

There are several troubling aspects in the proposed regulations, chief among them is allowing wild fish meal to be used to feed the penned fish. To maintain healthy and marketable products, the fish need a diet high in Omega oils that can only be gotten through other fish sources.

The problem is no one can certify wild-caught fish is 100 percent organic and that would be the first crack in lessening the rules for organic feed for fish and animals.

Some aquaculture systems, such as those for salmon, are "open," not contained. They are susceptible to diseases that can be spread, pollution and fish escapes that are not easily controlled or monitored in a standardized way.

Proponents of aquaculture as well as government supporters argue the organic designation, which is as much a marketing tool as it is a promise of purity, is necessary to help close the \$9 billion trade gap in imported fish products.

The trade gap is increasing because demand from consumers, looking for healthier diets and lifestyles, are turning more toward fish as the commercial fishing industry is weakening because of tighter regulations to control fish depletion.

But awarding the organic certification without the aquaculture industry meeting the standards is unfair to those commercial fishermen struggling to stay afloat. A shopper would be more likely to pick the item labeled USDA Organic rather than the wild caught cod that may be every bit as healthy but without the imprimatur of the federal government.

Without question, there is a future for off-shore fish farms and regulations can be implemented to certify them as organic once aquatic standards can be developed. Even now some of the "closed" pen operations such as catfish, oysters, tilapia and shrimp – species that are herbivorous – can meet organic principles and consumer expectations such as sustainability.

But there needs to be a sustained standard if the organic label is to mean anything to consumers. A 100-percent certified organic diet, no chemicals or genetic modifications, complete disposal of effluent and a water source that is free of contaminants while not draining local sources should all be part of any organic standards implemented for the industry.

More than 90 percent of Americans say they have fish at least once a month and around here, the frequency is three times that. Certifying an aquaculture source as organic would go far to increasing that as well as relieve some of the pressure on the depletion of many species.

But to slap a valuable label on a product that hasn't earned it deceives consumers while weakening the meaning of the term "organic."

The Patriot Ledger

<http://www.abc.net.au/rural/news/content/200811/s2417432.htm>

Barramundi farm ready to serve diamond miners

Wednesday, 12/11/2008

A small Aboriginal community in the Kimberley region of Western Australia says it's just months away from its first harvest of about 3000 farmed barramundi.

Owner of the Ribinyung barra farm, Neil McGinty, says the nearby Argyle Diamond Mine has already pre-ordered some barra and he's hoping to increase stock numbers to 20,000 next year.

He's hoping the success of his farm will encourage other indigenous communities to get involved in aquaculture.

"I'd like to learn as much as I can, so I can teach my mob, so if they want to do aquaculture then I can give them a hand or they can send in some boys who can train and work beside my boys, and we can help them do some aquaculture in their community," he says.

"We'd be there to help and get them going."

http://english.hani.co.kr/arti/english_edition/e_national/321327.html

In Yeosu, rising seawater temperatures threaten brown seaweed and oyster farming

The effects of global warming have slowed growth and decreased production, resulting in higher consumer prices and a drop in sales

The Hankyoreh



» Women put seaweed out to dry on Bogil Island, South Jeolla Province

Damages to brown seaweed and oyster farming along the southern coast of the peninsula are increasing as global warming has led to increased seawater temperatures.

South Jeolla Province announced Tuesday that “because of high seawater temperatures off the coast for the last three months, around half of the brown seaweed used to feed abalone in the waters off of Wando and the hanging culture oysters in the waters off of Yeosu have died off, while the rest are suffering damages from retarded development.”

September and October temperatures along the coast of Yeosu, South Jeolla Province, in the center of the southern coast, were over one degree Celsius higher than the measured average value for 1971 to 2005. In September, they were 25.57 degrees, 1.28 degrees higher than the previous year’s 24.29 degrees, while in October they were discovered to have risen to 21.93 degrees, 1.06 degrees higher than last year’s 20.87 degrees.

These rising temperatures have resulted in setbacks in the production of shellfish such as oysters and cockles, and

marine algae like laver and brown seaweed, which grow in cold water, and have also been affecting prices.

Around 60 percent of the 5,847 brown seaweed farms in Wando County, which is responsible for 45 percent of nationwide production, have suffered damages as over 2,300 of those that sowed spores early last September have had their brown seaweed, used to feed abalone, exhibit poor rootage and the melting away of young buds. This is because the farms were hastily established when seawater temperatures were around 26 degrees in order to meet the shipping date of mid-November, when young abalone colonize their beds, even though the appropriate water temperature for planting early harvest brown seaweed is 23 degrees.

Fishermen in major abalone-producing regions such as Nohwa and Bogildo are anxious as the price of early

harvest brown seaweed has soared two to three times from 70,000-80,000 won per 100-meter strand the same time last year to 200,000 won (US\$149) this year.

Choe Gap-jun, the province's official in charge of fisheries production, said, "As the shipping of early harvest brown seaweed is delayed and the price soars, it has become an emergency alert for fishermen trying to obtain food for abalone." Choe added, "We are recommending that they substitute dried kelp or salted seaweed as food and adjust their supply schedules."

At 980 oyster farms in the city of Yeosu, which accounts for around 20 percent of nationwide production, around half of the oysters died and the remaining oysters suffered retarded growth as high water temperatures continued following the planting of hanging culture oysters in May and June. The harvesting season is approaching, but as the oyster harvest has worsened, prices have risen around 20 percent from last year. In production centers, prices have risen from 25,000 won last year to 30,000 won for 45 kilograms of oysters with shells, and from 5,000-8,000 won last year to 8,000-10,000 won per kilogram for raw oysters.

Yeosu's Oyster Hanging Culture Fisheries Cooperative planning manager Jeong Dae-sin said, "Farmers are tearful as there have been many deaths and delayed growth all around." Jeong added, "Since sea waters are still warm, it will be difficult for oyster farming this year to avoid a fierce battle in quantity and quality."

Please direct questions or comments to [englishhani@hani.co.kr]

<http://www.ipsnews.net/news.asp?idnews=44646>

BIODIVERSITY: The Real Price of Farmed Salmon

By Stephen Leahy

UXBRIDGE, Canada, Nov 10 (IPS) - Salmon aquaculture is devastating the world's oceans and an international coalition of scientists, Canadian First Nations and tourism operators have called for a global moratorium.

"We've seen a regional collapse of all sea life in the 20 years since the salmon farms moved in," said Chief Bob Chamberlin of the Kwicksutaineuk Ah-kwa-mish Canadian First Nation in the province of British Columbia on Canada's west coast.

"I can only shake my head in bewilderment that this is allowed to continue," Chamberlin told IPS from Gilford Island in the Broughton Archipelago, where 20 salmon farms are in operation.

Scientific studies have linked sharp declines in wild salmon populations in British Columbia to disease and parasites originating in open-ocean salmon farms. Millions of non-native salmon have escaped ocean net-pens in Chile and have become an invasive species, transforming the ecology of local river systems.

These and other unsustainable practices violate the United Nations code on Responsible Fisheries, the coalition from Norway, Canada, Chile, Scotland, and Ireland claim. An international declaration has been submitted to the U.N. calling for a global moratorium.

There is little debate that salmon aquaculture is both unsustainable and environmentally destructive. Three or more kilograms of wild fish is needed to produce one kilo of farmed salmon. The ocean bottoms under and around the open-ocean net pens are usually devoid of any life, buried under the excrement of up to a million salmon overhead.

"Salmon farm 'shadows' can extend three or four kilometres depending on the current," said Wolfram Heise, director of the marine conservation programme at the Fundación Pumalin (Pumalin Project), a private conservation initiative in

Chile.

These shadows are dead zones where there is nothing but mud and faeces along the bottom of the ocean. "Oxygen levels in the water are so depleted it sometimes forces the farms to move to new locations," Heise told IPS from Puerto Varas, located 1,000 kilometres south of Santiago.

In Chile it costs only 100 dollars a year to "rent" another salmon farm concession that gives the mainly Norwegian owners indefinite provenance over the region, including the ocean bottom. In less than 15 years, Chile has become the second largest salmon producer in the world with close to 700 farms, he said.

Nearly all the Atlantic salmon grown here are sold to feed Japanese, North American and European appetites for salmon. But the true costs of these floating factory farms are ignored by industry and the government of Chile and unknown by the public, Heise said.

Like land-based factory farms where far too many animals are being raised in confined quarters, heavy doses of antibiotic drugs and hormones are fed to the fish. Despite this, a potent virus swept through Chile's salmon farms last year and has cut production in half. Unable to stem the outbreak, the farms simply moved to new locations hundreds of kilometres away, abandoning their local employees and the contaminated waters and seabed.

"There is no investigation here to see if the virus is having an impact on marine species," Heise said.

There are no native salmon in Chile, but Heise said some coastal fish have been found with symptoms similar to the virus called infectious salmon anemia. "It would be astonishing if the virus did not infect other species sooner or later," he told IPS.

Millions of salmon have also escaped in Chile and are eating other fish species. They have begun invading rivers and lakes as far away as neighbouring Argentina where there is no salmon farming. Again, there is little investigation into the impacts of the escaped salmon and the industry denies there is a problem, he said.

Salmon have become Chile's second largest export earner. The government sees it as a "money-making machine" and economic growth has priority over everything else, Heise said, adding: "No one is measuring the collective impacts, the huge damage being done."

On Canada's west coast scientists have connected the decline in wild salmon stocks to the region's 100-plus salmon farms. After publishing their research in the prestigious journal *Science*, marine biologists warned that one wild salmon species will be extinct by 2011 because of infestations of parasites that originate in salmon farms. More than 80 percent of the annual pink salmon in the Broughton Archipelago, 300 kms north of the city of Vancouver, has been killed by these parasites since 2001.

"They're [salmon farms] like a cancer, destroying the ecosystem they're in," said Alexandra Morton, a Canadian research biologist who has done much of the research on the impacts of the industry.

North America's northwest coast is home to several species of wild salmon that remain one of the natural wonders of the world and are a key part of the coastal ecosystem. After spending two or more years feeding in the open ocean, they return to their natal streams and rivers to spawn and die. Many species, including eagles, bears and wolves, feed on the dying or dead salmon. They also bring large quantities of salmon carcasses into forests, which decay, enriching the soil and feed many plants, including the region's giant red cedars and sitka spruce trees.

Salmon nutrients have been found inside the leaves at the top of 2,000-year-old trees.

"Wilderness tourism in British Columbia is worth 1.6 billion dollars a year, and wild salmon underpin all of this," Morton said in an interview.

Aquaculture salmon is worth less than 500 million dollars in Canada and is dominated by Norwegian companies. The industry is killing the crucial component of British Columbia (B.C.) wilderness and what could be one of the biggest sources of protein if properly managed, she said. "The west coast could produce huge amounts of fish as it once did."

Over a year ago, a BC government report recommended a move towards closed-containment systems for salmon

aquaculture, but the industry has vigorously opposed this. Norwegian companies dominate the multi-billion dollar industry, and Norway has large operations there. However Norway's few remaining river systems with wild salmon are strictly protected and aquaculture operations are located far away, unlike in Canada.

"They came into my territory and denied, delayed, distracted us from the truth for 20 years with no regard for their impact on the environment and my people," said Bob Chamberlin.

Chamberlin and other native leaders have tried to get Norwegian companies such as Marine Harvest, the world's lead seafood company, to move to a closed containment system for a number of years, without success.

Marine Harvest produced 340,000 tonnes of salmon in 2007 and has acknowledged many of these problems. In April of this year the company agreed to work with a leading environmental group, the World Wildlife Fund (WWF), to find ways to reduce their environmental and ecological impact.

"There are a lot of issues with farmed salmon," acknowledged Jose Villalon, a long-time manager for Marine Harvest who joined the WWF in 2007 as its director of aquaculture programme.

Villalon told IPS that the WWF is overseeing a series of "Aquaculture Dialogues" with various stakeholders in hopes of developing standards for more sustainable aquaculture production, but declined to comment further.

"Is it too much to ask that companies like Marine Harvest safeguard our environment?" Chamberlin asked.

(END/2008)

<http://finfish.org/blog/risk-management-options/> **Aquaculture Risk Management Options**

November 9th, 2008 by **ibthi**

Recently the New Zealand government commissioned a report to evaluate the risk management options for its local aquaculture industry. The report is an interesting read and provides information on risk management in aquaculture that is relevant to industry participants and governments of all countries.

The main aim of the report was to identify risk management issues that might arise from aquaculture activities in local coastal marine areas and to explore risk management options available to both local government and the aquaculture industry.

The report notes that although many industries have for a long time implemented structured risk management programs, such an approach is not consistently used in the aquaculture industry. In the study aquaculture stakeholders identified the following risks as most likely leading to business failure:

- Catastrophic natural disaster
- Biosecurity threats
- Exchange rate fluctuations
- Water quality changes that may result from spillages or sewage system failures.

None of the risks identified were so high that aquaculture, as practiced and controlled today, is so risky that it should not be permitted.

Interested readers can download the report from [here](#).

Download report from here <http://www.mfe.govt.nz/publications/oceans/aquaculture-risk-management/index.html>

The PDF is here:

<http://www.mfe.govt.nz/publications/oceans/aquaculture-risk-management/aquaculture-risk-management.pdf>

<http://nqr.farmonline.com.au/news/state/niche/general/seafood-industry-welcomes-walkamin-decision/1351438.aspx>



Seafood industry welcomes Walkamin decision

6/11/2008 4:00:00 AM



Dr Trevor Anderson, President of QAIF, says he was happy to learn of the Government's decision to maintain the Walkamin research facility.

THE Queensland Aquaculture Industries Federation (QAIF) has welcomed the decision by the Queensland Government to keep open the research facility at Walkamin on the Atherton Tablelands.

Dr Trevor Anderson, President of QAIF, said farmed seafood is a vital and growing part of primary industry in Queensland and research is vital to the industry achieving its full potential.

He said Walkamin research station is one of the only facilities in Australia undertaking research on fresh water aquaculture and the research done there was a huge benefit to the Queensland aquaculture industry.

"We are now farming a range of native Queensland fresh water species including red claw crayfish, silver perch, Murray cod, sleepy cod, and barramundi.

"These species are appearing as gourmet `native produce on the menus of the best

restaurants in Australia and are increasingly going to be available to consumers" he said.

Dr Anderson said the role the Walkamin aquaculture research facility has played in developing the industry in Queensland includes the successful domestication and selective breeding of crayfish and developing and testing systems for ensuring environmental impacts are to world best standards.

"Queensland farmed seafood is very much a "Smart State" initiative and ensures that consumers get high quality Australian produce they can trust. Now we are confident about the ongoing status of the facility, we will be ensuring a great deal more of industry's research effort is directed towards Walkamin," Dr Anderson said.



<http://nqr.farmonline.com.au/news/state/property/general/rural-property-shakes-economy-crisis/1351436.aspx>



Rural property shakes economy crisis

6/11/2008 4:00:00 AM

PROPERTY valuers Herron Todd White's (HTW) November Month in Review reports that in the Northern Territory there are an unprecedented number of large properties on the market, including some large well developed holdings.

Recently La Belle Downs/Welltree sold for \$72.5 million, indicating strong prices for good quality Northern Territory properties.

The latest listing is the well-known Tipperary aggregation, just west of Adelaide River.

This is an aggregation of five separate properties comprising more than 9000km² and ranges from coastal floodplains on Elizabeth Downs and Litchfield, through to more upland country on Tipperary, Douglas and Fish River.

About 400,000ha was cleared, although large areas have fallen to re-growth.

The property is within the Daly River clearing moratorium area and it is reported that frustrations with the native vegetation legislation in the

There have also been some strong prices for Far North Queensland properties, although perhaps not in the traditional beef enterprises as has been the case in recent years.

In particular, HTW indicated that there appears to be strong demand for aquaculture operations.

Yields for these operations range from a little over 12 per cent to 16pc on net income.

"These can be considered low yield rates when compared to the yield rates from other operations, with perceived lower risks such as caravan parks, hotels and motels (9-18pc)," according to the report.

HTW reports that the yields being shown for aquaculture interests may be due to accepting that this form of operation will have an increasingly important role in world seafood production.

The report said the North Queensland aquaculture industry has had mixed fortunes over the past few years.

"The barramundi farming industry continues to grow solidly on the back of good marketing, a public acceptance of the product and dwindling of wild catch numbers leading to an increase in demand and price," the report said.

"The opposite is true for the prawn farming industry, with fewer producers, lower production and a marginal fall in price.

"The continued import of prawns from China and Asia has not helped price, with these imports for sale at lower prices than Australian prawns.

"Barramundi production increased significantly (20pc) in 2007. The majority of production came from pond and cage-based systems."

The November report highlighted the fact the wheat harvest has commenced in Central Queensland, and after a reasonably good winter and good rainfalls, a reasonably high crop yields are expected.

"It is anticipated that land holders will look to expand their operations by looking around to purchase additional land," HTW reported.

"There have been few sales over winter due to uncertainty in the rural sector and lack of confidence shown by potential purchasers.

"However, there are now many properties listed for sale, including some large holdings such as the 13,700ha Laglan Station, west of Clermont to be auctioned in mid December.

"This offering and the recent sale of Inkerman Station, (16820ha) to the North for \$13.3 million may set the tone of confidence in the market.

"The upcoming auctions in November and December will be a great indicator of the strength in the market in Central Queensland."

*Full story in this week's North Queensland Register, out Thursday.

<http://www.pressandjournal.co.uk/Article.aspx/902867?UserKey=>

The Press and Journal

Anger as fish farms refuse to move

Warning of 'catastrophic consequences' from sites on migration routes

Published: 04/11/2008

Environmentalists yesterday urged the Scottish Government to review its policy of allowing fish farmers to decide whether they should relocate their operations when sited on wild salmon and trout migration routes.

Warning of "catastrophic consequences" for the species if such farms are not moved, campaigners are frustrated at what they consider the absence of policing of escapes from fish farms and monitoring of the sea lice problem which they allege is being exacerbated by the captive food supply of caged fish.

The Scottish Government confirmed that "some farms may be located in inappropriate places," and that it financed a scheme to relocate them "on a voluntary basis". Three farms have been relocated at a cost to taxpayers of £370,000.

Environmentalist Bruce Sandison accused politicians of a cover-up and said he was disgusted with the voluntary element of the policy.

"I have spent many years trying to pin down facts from a recalcitrant government which continually protects the industry from public scrutiny," he said.

"The industry is in the wrong place at the wrong time. They need to bring it on to land-based closed-containment systems.

"There would be no danger to wild fish and their own farmed fish would no longer suffer from attacks from sea lice which cost millions of pounds a year."

Frank Buckley, of the Society for the Protection of Salmon and Sea Trout, argued that if wild stocks were to have a future in the Highlands there was “no alternative” but to relocate farms away from routes.

Eleanor Scott, a Green Party spokeswoman and former member of the rural affairs committee, said: “There’s no reason for an inappropriately sited fish farm to stay in an inappropriate site.”

A Scottish Government spokesman said voluntary relocation had been “lower than anticipated, mainly due to planning difficulties including objections from anglers over finding alternative sites for production”.

A spokesperson for Scottish Salmon Producers’ Organisation said: “The salmon industry recognises the Scottish Government’s support for the sustainable development of finfish and shellfish farming.

“As an active member of the recently-formed expert working group set up to identify and examine the location of sustainable aquaculture sites in order to maximise Scotland’s coastline, we will continue to participate fully in this initiative.”

A spokesman for the Scottish Environment Protection Agency insisted the industry was regulated by a number of bodies – discharges of waste and effluent from fish cages by Sepa, planning regulation by local councils and the monitoring of health and disease issues by the Fish Health Inspectorate.

“Escapes of fish from fish farms are dealt with by the Scottish Government,” he added, “although there are new powers about to commence under the Aquaculture and Fisheries (Scotland) Act 2007, which give the role of regulating this issue to the Fish Health Inspectorate.”

<http://www.huffstrategy.com/MediaManager/release/Salmon-and-Sea-Lice/3-11-08/International-Declaration-Against-Unsustainable-Salmon-Farming-se/1405.html>

Environmental Communication Options' Media Releases

International Declaration Against Unsustainable Salmon Farming sent to United Nations

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Media Release

Fish farm opposition - the gathering storm goes international

International Declaration Against Unsustainable Salmon Farming sent to United Nations

(Norway, Chile, U.S., U.K., Canada) November 3, 2008 - International environmentalists, First Nations, scientists, tourism operators and owners, fishermen/women met in Chile, Norway and Canada on the impact of salmon farms. Joined by people from Scotland, U.K and the U.S. they are sending the **Declaration Against Unsustainable Salmon Farming** to the United Nations reporting that industrial salmon farming is using the same ruinous tactics worldwide. “They came into my territory and denied, delayed, distracted us from the truth for 20 years with no regard for their impact on the environment and my people”, states Bob Chamberlin chief of the Kwicksutaineuk/Ah-kwa-mish First Nation in Canada.

Industrial net pen salmon farming originated in Norway then moved into Scotland, Ireland, Canada and is

now spreading rapidly through Chile at huge ecological cost. Scientific studies show that wild salmon populations are crashing wherever there are salmon farms due to pathogen amplification and genetic pollution, but the damage runs much deeper.

Participants signed the Declaration in united opposition to the current practices of industrial salmon farming, citing not only damage to wild salmon, but also labor law infractions in Chile, viral epidemics, impact on the indigenous Sami of Norway and First Nations in Canada, fouling of local food resources with drug and waste release as well as reduction of the global food supply - taking more wild fish than it produces.

"I'm deeply ashamed as a Norwegian. After damaging our wild salmon, the industrial salmon farmers are fouling the pristine waters of Canada and Chile. Nobody in Norway knows about this, but I will tell them," warned Kurt Oddekalv of Green Warriors of Norway.

Anne Mosness, of the U.S. Go Wild Campaign says, "In Washington and Maine massive escapes, diseases and the possibility of genetically engineered fish and offshore farms pose huge risks to the viability of our oceans. We cannot ignore our obligation to future generations to keep our oceans alive."

The 1995 United Nations Code of Conduct for Responsible Fisheries states "*As a primary goal, aquaculture development should conserve genetic diversity and minimize negative effects of farmed fish on wild fish populations, while increasing supplies of fish for human consumption.*"

"We declare each of these principles violated by today's salmon farmers," says Canadian biologist Alexandra Morton.

While some would like to see salmon farms in closed tanks, Dr. Wolfram Heise, of Chile states: "It is simply not possible to produce salmon in a sustainable way. You will never get it into ecological balance. There is no right way of doing the wrong thing! This industry plunders the wild fish stocks of the oceans and to destroy the coastal marine ecosystems which will need decades to recover, if ever."

The signatories have spent years working to protect their coastlines from salmon farming with little result and today come together in a global response to a global industry. They invite others to sign the Declaration Against Unsustainable Salmon Farming at www.ourglobalocean.org.

The full text of the declaration can be viewed by clicking on Download Original Release.

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Health Management

November 3rd, 2008 by **mihir gandhi**

Over three decades aquaculture has expanded, diversified and intensified in terms of brood stock, feed and seed.

It has led to evolution of pathogens and disease in aquaculture systems. Impacts of this has been severe other than mortalities and production loss- which are particularly felt by small scale farmers who are the backbone of rural industry all over the world. It has directly threatened livelihood through reducing food availability, loss of income and employment alongwith all associated social consequences.

Effective solution of such problem is associated with various challenges such as human resources, infrastructure, availability of information and data, farmer knowledge base, funding, political commitment, government priorities, response from farmer/industry/consumer response, varying degrees of interactions between the stakeholders, environmental factors(river systems shared by many countries, continuous marine coastal zones, etc). The list is very big to be fulfilled so an effective health management should be efficient enough to cover all the aspects of aquaculture industry from production unit to international levels.

Such programme requires constant open innovations and information from all the possible direction. Effective health management programme will require co-operation from all the parties involved in this activity which can only be achieved by educating about the benefits from it to the farmers and others involved in production. Diseases will be continue to evolve, efforts to control them and there will be range of problems to be tackled in the way. Thus in order to have effective control over such problems can be only gained with co-operation from all the management such as economic, social and political.

If the present situation continues in the long run problem of epidemics and its related costs will be far beyond economics

<http://www.theaustralian.news.com.au/story/0,25197,24450474-2702,00.html>

Global warming set to shake our eating habits

Paul Maley | *October 06, 2008*

CLIMATE change is likely to deprive us of the pleasures of eating beef and lamb, instead forcing us to contemplate platefuls of kangaroo meat and threatening another Australian table staple -- seafood.

A report to be released by the CSIRO today says changes in temperature, ocean currents, rainfall and extreme weather events could cost Australian fisheries tens of million of dollars.

Hardest hit could be stocks of Tasmanian salmon, estimated to be worth \$221million in 2005-06 and representing 30 per cent of the total national aquaculture production.

The report says projected ocean warming of 2-3 degrees by 2070 could render salmon farming unviable, leaving open the possibility of salmon farmers having to shift their operations offshore to deeper, cooler waters.

And the retreat of mangrove forests and seagrass beds could leave commercially farmed banana prawns, mud crabs and barramundi without their habitats, the study found.

Climate Change Minister Penny Wong said the report was a preliminary assessment of the effect climate change could have on Australia's commercial fishing and aquaculture industry, worth about \$2.1 billion.

"The report finds climate change is likely to affect not only the fishing industry but also the regional and coastal communities the industry supports," Senator Wong said.

"It finds climate change impacts will vary by region and that many impacts are expected to be negative, with some data suggesting that effects may have already occurred."

The CSIRO assessment comes on the back of a similar warning issued by the Rudd Government's climate adviser, Ross Garnaut, who warned that sheep and cattle farming was "highly vulnerable" to climate change.

Professor Garnaut backed kangaroo meat as an alternative, on the grounds that kangaroos emit "negligible" levels of methane gas.

"For most of Australia's human history -- around 60,000 years -- kangaroo was the main source of meat. It could again become important," the CSIRO report says.

However, the report says climate change may have positive impacts on some fish stocks.

The CSIRO's Richard Matear, who helped write the report, said some species could benefit from expanded habitats.

"There are other fisheries that will benefit from having expanded range because temperatures are warming and they can move further south," Dr Matear told The Australian.

But he said that given the long lead time with some aquaculture facilities such as salmon farms, the industry needed to start thinking about the potentially destructive effects.

"When people put these aquaculture facilities in place they're looking at investments for 10-20 years, so people need to start thinking about the potential effects now," he said.

Dr Matear said it was not certain all of the changes documented in the report were attributable to climate change.

The infestation of long-spined sea urchin that threatened Tasmanian rock lobster and abalone fisheries was not necessarily the product of climate change, he said. "Is that a climate change signal or is it more likely a human impact of fishing? I don't think it's certain."