

# FEIKE NEWS

October 2007

fisheries  
aquaculture  
ecosystems

natural resource management advisors

FEIKE

Welcome to the October edition of **Feike News!**. As always, we trust that you will find our selection of important and hot issues worth reading. In this month's edition we explore a number of various interesting fisheries stories from Southern Africa to the European Union.

Visit [www.feike.co.za](http://www.feike.co.za) for **Breaking News**.

## In this Month's edition:

1. Policy for the Development of a Sustainable Marine Aquaculture Sector in South Africa Published
2. Aquaculture Brings Back Abalone to British Columbia's Dinner Tables
3. The 1000 Fishing Permits Strategy Faltering
4. Tuna Industry Under Threat
5. Norwegian Whaling Vessel Sunk
6. Owners Told to Demolish Wild Coast Cottages
7. Mediterranean Marine Life under Threat (Again)
8. Armed Conflict and Environmental Specialist Group
9. BOFFFF Hypothesis

## NEWS BRIEFS

- ▶ Namibian Desalination
- ▶ Polish Cod Fishermen will not be Fined
- ▶ Countries Ignoring Tuna Guidelines
- ▶ Bruce See Resigns
- ▶ Draft Programme for the 8<sup>th</sup> Conference of the Aquaculture Association of Southern Africa
- ▶ BENEFIT – BCLME Symposium
- ▶ Feike Appointed To Advise Mozambique Government on Fisheries Compliance Database

## 1. POLICY FOR THE DEVELOPMENT OF A SUSTAINABLE MARINE AQUACULTURE SECTOR IN SOUTH AFRICA PUBLISHED

On 7 September 2007, the Minister of Environmental Affairs and Tourism published the final Policy for the Development of a Sustainable Marine Aquaculture Sector in South Africa.

The Policy has very many laudable objectives and principles, including encouraging acceleration of the development of the marine aquaculture industry, promoting the development of an economically sustainable and globally competitive industry with minimum negative impact on the environment. The Policy also states that a key principle is that the role of government is to facilitate and support the industry, which must be driven by the private sector. It is intended that the Policy will be complemented by a Marine Aquaculture Development Plan, which will outline strategies for its practical implementation. Guidelines for the establishment and management of specific forms of marine aquaculture will also be developed. These will include new activities such as sea ranching, stock enhancement, rearing of species for the aquarium ornamental trade, and sea-based cage farming.

Although the Policy is to be broadly welcomed as an important step indicating the South African government's long awaited formal support for fish farming, there are a number of concerns that require addressing. Firstly, the Policy states that fish farming rights of up to 20 years will be allocated by the Minister of Environmental Affairs and Tourism. While this is an example of one of the laudable policy provisions, it is unfortunately unlawful! It is unlawful because the Marine Living Resources of 1998 (the MLRA) stipulates that a fish farming right may not be allocated for a period longer than 15 years. Executive Policy of course cannot amend an Act of Parliament. Secondly, in terms of the South African Constitution, the Policy ought to have been issued by South Africa's Cabinet. It does not appear as if the Policy was issued in terms of section 85 of the Constitution. On these two grounds alone, the Policy would have to be withdrawn, amended and re-issued to ensure conformity with the MLRA and the Constitution. Thirdly, the practice of evaluating and disposing of applications for fish farming does not support the various laudable objectives and principles, particularly those pertaining to encouraging investment and job creation. For example, the concept of "polyculture" – the farming of more than one species of fish in a single system – is not understood at all. Applicants are required to complete separate application forms that are dealt with individually and on a case-by-case basis. In addition, there is no indication that MCM intends reducing the current timeframes for the evaluation of applications, which typically takes 12 months or more to process. This is a particularly relevant disincentive to invest in the industry.



## 2. AQUACULTURE BRINGS BACK ABALONE TO BRITISH COLUMBIA'S DINNER TABLES

For the first time in decades, the **northern pinto abalone** is starting to appear legally on high-end menus in the Canadian province of British Columbia. This development is the result of a community re-seeding project aimed at saving the northern pinto abalone at the Bamfield/Huuy-ay-aht Community Abalone Project.

Over harvesting of the pinto abalone in 1970's and 1980's resulted in the population being threatened. Although harvesting has been banned since the 1990's, populations of the long-lived sea snail did not recover due to poaching. The Bamfield experiment was started seven years ago as a joint project between the Marine Science Centre, the First Nations and the local community and aims to re-seed dwindling populations. The second part of the project is culturing northern abalone for sale to help fund stock restoration and to provide employment in the community of Bamfield.

The communities of Hawston, Hermanus, Gansbaai and Kleinmond on the Cape's Overstrand Coast probably recognise the tale of poaching and collapsed stocks. South Africa's abalone stocks have been decimated due to a combination of poaching and lobster migration into the abalone rich areas of Hawston and Hermanus. Total Allowable Catches in both these regions have been set at zero for the past 2 seasons. The sad reality is that these two regions are also home to more than 90% of South Africa's commercial abalone divers.

The total closure of the South African abalone fishery, which appears increasingly likely as poaching strategies continue to fail dismally, will have substantial adverse socio-economic consequences for the region. These adverse consequences could have been avoided in large part had the South African government commenced with a re-stocking strategy in 2005 when the first zero TAC's were issued for the Hermanus and Hawston regions. Community projects similar to those implemented in Chile and Bamfield would today be a mere two to three seasons away from yielding the first marketable harvests of abalone.

## 3. THE 1000 FISHING PERMITS STRATEGY FALTERING

It appears as if the Minister's attempted intervention during the Winter to provide subsistence fishermen along the Cape West and South coasts with a form of temporary relief in the form of a 1000 fishing permits is faltering. The South African United Fishers Front (SAUFF) recently addressed an open letter to the Minister of Environmental Affairs and Tourism and his Department.



The letter starts by noting that each time MCM makes a decision, the fishing industry is left with more questions than answers. Compounding this is that it is almost impossible to reach anyone at MCM.

The letter notes that the intended relief measure has not benefited any of the fishing communities along the coast. More disturbing is the allegation that entire fishing communities such as Hawston, Vermaaklikheid and Melkhoutfontein were completely excluded from this process. The SAUFF also allege that in numerous fishing villages only fishermen associated with the organising entity – Coastal Links – were issued with interim relief permits.

SAUFF is also alarmed at the response that its members are currently getting from MCM where they are told to contact Coastal Links with any problems they may be experiencing. Has MCM delegated regulatory authority to Coastal Links and appointed it as the representative of all subsistence fishers?

SAUFF has stated that it is not opposed to the issuing of rights/quotas but they feel that as a collective, they must ensure that whatever is done to improve the situation within the fishing communities is thoroughly researched and is done with the full participation of those concerned.

#### 4. TUNA INDUSTRY UNDER THREAT

The future of the tuna industry depends largely on the development of successful aquaculture according to the **Glitnir Seafood Industry Report**. The report shows that the global tuna catch has stagnated and the stocks of the most popular subspecies are currently fully exploited or in a stage of depletion. The Glitnir Report provides an analytical overview of the current main developments in the tuna industry worldwide. Tuna is the fourth largest fisheries product in terms of international trade. The country with the highest tuna consumption is Spain with a per capita consumption of 3.3kg per year. Price and availability vary greatly between the tuna sub-species. Demand for canned tuna is decreasing while fresh tuna, especially sashimi grade products, is gaining popularity especially in Europe and the USA. According to the report, global tuna stocks are currently more or less fully exploited and as far as bluefin tuna is concerned, the limited supply has pushed prices to levels consumers are barely able or willing to pay for.



## 5. NORWEGIAN WHALING VESSEL SUNK

On 30 August the Norwegian whaling vessel, the *Willassen Senior*, sank in the Northern Norwegian harbor city of Svolvær. No person was onboard the 89 foot long vessel when it sank. There is a possibility that it could have been sunk by sabotage. Norwegian whaling vessels have been sabotaged many times. In 1992 there was a failed attempt to sink the vessel *Nybraena*. Other Norwegian whaling vessels that have been sunk to date include:

- The *Nybraena* - scuttled dockside in the Lofoten Island in December 1992;
- The *Senet* - Scuttles dockside in Fredricksberg, Norway in January 1994;
- The *Elin-Toril* - Severely damaged in 1997;
- The *Morild* - Sunk in 1998.

## 6. OWNERS TOLD TO DEMOLISH ILLEGAL WILD COAST COTTAGES

The Supreme Court of Appeal dismissed an appeal by the owners of holiday cottages against an eviction order obtained by the South African government.

The owners of the holiday cottages on the Wild Coast just north of Port St Johns who built the cottages on land acquired for a 'customary fee' of R200 were ordered to demolish the cottages. The land was acquired by speaking to the local headman and informing him of their wish to obtain a site on the coast, which they identified to him. The headman then took them to the chief of the local tribe. Once they had obtained the chiefs approval, aided by a bottle of brandy, they then attended a meeting of the tribal authority. After the meeting had approved the request they paid the 'customary fee' of R200.

It was also found that the defendants built their cottages in direct contravention of the law in an ecologically sensitive area. The owners have been given 4 months to demolish the cottages.

## 7. MEDITERRANEAN MARINE LIFE UNDER THREAT (AGAIN)

Italy's Institute of Marine Research (ICRAM) warned in a new report that Climate change has warmed up the Mediterranean Sea and threatens its rich animal and plant life.

The alarm bell came a day before the start of a national conference on climate change in Rome. The experts said a cold current emanating from the Gulf of Trieste off northern Italy, which allowed the waters of the Adriatic and the Mediterranean to mix, had vanished since 2003 due to warming.



This threatened to turn the Adriatic Sea into a salt lake with no marine life. Temperature rises of 0.4 degrees Centigrade could alter up to 50 percent of the species. Italy's Environment Minister, Alfonso Pecoraro Scanio, on termed the situation "a national crisis".

The conference also discussed the melting of Alpine glaciers, drought, desertification and the choking of the lagoon at Venice and in the northern Adriatic.

## 8. ARMED CONFLICT AND ENVIRONMENTAL SPECIALIST GROUP

The IUCN's Specialist Group on Armed Conflict and Environment has commenced work. Within the broad range of topics surrounding armed conflict and the environment, the Specialist Group will focus its attention initially on post-conflict management of natural resources and how effective management can facilitate the transition to peace.

At the centre of the Specialist Group's activities will be a review, assessment, and synthesis of experiences to date, particularly over the past 20 years. This analysis will rely on case studies of experiences from different post-conflict settings around the world. Case studies may be drawn from, among others, Afghanistan, Cambodia, East Timor, El Salvador, Ethiopia, Guatemala, Iraq, Liberia, Mozambique, Nepal, Nicaragua, Tajikistan, and Uganda, the republics and provinces of the former Yugoslavia, countries around the Jordan River and Japan.

As a first step, the Specialist Group convened, in partnership with UNEP's Post-Conflict and Disaster Management Branch, a consultative meeting on *Managing Natural Resources in Post-Conflict Societies: Lessons in Making the Transition to Peace*. The meeting was held in Geneva in September.

## 9. BOFFF HYPOTHESIS

Modern fisheries management has often guided fishermen to select large individuals of targeted stocks by using size-selective gear or releasing small individuals back to the water. The reasoning has always been that this allows smaller, younger individuals to grow up to a reproductive age, thereby sustaining the stock.

Recent research however shows that removing the larger older individuals of a population may actually undermine stock replenishment. This appears especially to be the case with the removal of larger, older females which often produce significantly more offspring – and sometimes stronger offspring – than younger females do.



Some researchers have proposed the idea that maintaining old-growth age structure can be important for replenishing fished populations. It has been termed the Big Old Fat Fecund Female Fish (BOFFFF) hypothesis.

The BOFFFF hypothesis arose largely due to the work of biologists Alan Longhurst on population structure of Atlantic cod and Steve Berkeley on maternal effects in Pacific rockfishes. The hypothesis is based on document cases of older, larger female fish producing more young per year – often exponentially – than younger females. The larvae of these older females may also be larger, with greater fat reserves that can aid growth and survival. Older females can also have earlier and/or longer spawning seasons.

The BOFFFF hypothesis applies better to some species than others. The species in which it has been best demonstrated are long-lived and live in temperate waters such as the Atlantic cod which can live for 20 years and the Pacific rockfishes which can live for 200 years. In contrast short-lived and/or tropical species tend not to exhibit the same degree of variability in size of young and spawning season. Nonetheless no fish (whether large or small) is totally exempt. At least part of the hypothesis – that older fish can out-live periods of unfavourable recruitment – pertains to all fishers says Hixon a biologist at Oregon State University.

David Conover, a biologist at Stony Brooke University has studied the long-term effect of size selective fishing on population size and structure. The study shows how removing larger, older females and other large adults can result in evolutionary changes in populations. Conover discovered that not only does fish size in populations become smaller over time, but the populations also evolve characteristics that make it more difficult to survive and reproduce when fishing ends. That is size-selective fishing removes stronger individuals and leaves slower growing ones, the opposite of what evolution would do.

Hixon and Conover say steps are needed to protect BOFFFFs and guard against the evolutionary changes caused by size-selective fishing. In general, according to Hixon, there are three main management tools available to conserve older fish in an exploited population:

- Reduce the rate of exploitation significantly – an economically infeasible option for many fisheries
- Institute slot size limits in which there is both a minimum and maximum size for retention – an option primary available for fishes that can readily be released unharmed after capture
- Designate marine reserves that set aside areas in which fishing is prohibited and older fish can survive and spawn.



The BOFFFF hypothesis is still new and there remain few examples of management programmes created specifically to protect larger, older females. However, one such programme has been informally adopted by some fishermen in Port Orford, Oregon (US). Here several fishermen have begun returning gravid females to the water. In May 2007, the Port Orford Ocean Resource Team, which represents local fisher communities, responded by formalizing this voluntary conservation measure.

## NEWS BRIEFS

### NAMIBIAN DESALINATION

UraMin Inc. which is developing a uranium mine at Trekkopje in the Erongo region, and NamWater, Namibia's bulk water supplier, are planning on building a desalination plant at the coast near Wlotzkasbaken.

NamWater is currently investigating whether the existing pipeline network will be capable of supporting the anticipated water demands. The water will have to be brought to Swakopmund from Wlotzkasbaken and NamWater is currently replacing 6km of the Omdel pipeline. A large pipeline will have to be built from the desalination plant to Swakopmund and NamWater is planning to build a reservoir to mix the Omdel and Wlotzkasbaken water to get improved water quality to Swakopmund.

### POLISH COD FISHERMEN WILL NOT BE FINED

Poland will not impose fines on fishermen who break a European Union order to halt trawling for cod in the Baltic Sea that is aimed at protecting the threatened species. The European Commission ordered Poland to stop fishing in the area, saying that Poland had misreported its catch and exceeded its allowed EU quota.

The dispute is one of several points of friction between the Poles and the EU on the environment. Large discrepancies between cod catch figures reported to Brussels by Polish authorities and those provided by EU inspectors revealed that Poland had exhausted its 2007 quota for the area.

Scientists have long advised that the eastern Baltic cod has been overfished to the point where the species might vanish from the area and have recommended an outright ban on cod fishing.

Polish Marine Economy Minister, Marek Grobarczyk, tried to convince the European Commission to scrap the ban, presenting documents he said showed stocks of fish were higher than estimated by the EU. The Commission said recently that it would have to cut the amount of cod caught by a third in 2007 if the species is to stand a chance of surviving after years of overfishing. The Polish Government has stated that it will not punish its fishers for overfishing cod stocks in the Baltic.

### COUNTRIES IGNORING TUNA GUIDELINES

The European Commission fired off its first warning to seven EU states for failing to report on catches of bluefin tuna as stocks dwindle as a result of Asian demand.

The European Union's Executive arm gave Cyprus, France, Greece, Italy, Malta, Portugal and Spain a month to respond to the official warning, which marks the first step towards suing the countries in an EU court. France and Italy were also singled out over "shortcomings in their control" of tuna fishing.

The Commission has already banned fishing of bluefin tuna in the eastern Atlantic and the Mediterranean for the rest of the year due to the fact that the quotas for 2007 have



already been met. Environmentalists have warned that tuna face extinction if fishing continued at current rates to feed worldwide demand for Japanese food such as sushi. Tuna is an increasingly lucrative industry, particularly for developing economies that export to Japan, which consumes a quarter of the world's tuna.

#### **BRUCE SEE RESIGNS**

On 10<sup>th</sup> of September Bruce See handed in his letter of resignation as Chairman and Member of South African Boat Based Whale Watching Association (SABBWWA). In addition to the resignation Coastal & Marine Eco-Tourism Corporation (Comet) will cease to represent or fund SABBWA and over the next few weeks all mention of associations between the two will be removed from letterheads, websites and other public media.

#### **DRAFT PROGRAMME FOR THE 8<sup>TH</sup> CONFERENCE OF THE AQUACULTURE ASSOCIATION OF SOUTHERN AFRICA**

The conference is going to be held at the Cape Town Convention Centre and will run concurrently with the Fish Africa and Aquaculture Trade Shows which will also be hosted at the Cape Town Convention Centre.

The itinerary includes:

- 22 October: Field Days and Aquaculture Tours, Social Event (TOA)
- 23 October: Conference (CTICC) and AASA AGM (Two Oceans Aquarium)
- 24 October: Conference (CTICC) and Banquet (Krugmann's Grill)
- 25 October: Workshops (Sea Point Aquarium & other)
- 26 October: Training Programs (University of Stellenbosch)

#### **BENEFIT – BCLME SYMPOSIUM**

A symposium celebrating a decade of collaboration in the Benguela region, the outcomes of the BENEFIT and BCLME Programmes and the establishment of the Benguela Current Commission will be held in Swakopmund from 19 – 21 November 2007.

#### **FEIKE APPOINTED TO ADVISE MOZAMBIQUE GOVERNMENT ON FISHERIES COMPLIANCE DATABASE**

Feike was recently appointed by the Mozambique Government to advise it on the development and design of a fisheries compliance and information management system.

The IUU Vessel, *The Ross*, seen here in Maputo Harbour on 3 October 2007. It had temporarily changed its name to *Limpopo* (blacked-out white area) but reverted to its more infamous name recently.



Picture: Shaheen Moolla, Feike © 2007.

FEIKE  
natural resource management advisors

