



Krill Industry Report Number 9

Antarctic and Southern Ocean Coalition

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The Krill Industry Report provides reports, information and commentaries on the Antarctic krill industry.

Notifications Reduced in Advance of CCAMLR meeting

A total of 23 vessels from nine countries have applied to go fishing for krill in Antarctic waters next year. This is the same number of countries and fewer vessels than the 25 that notified last year, but there has been an increase in the proposed effort.

The proposed total catch (subtracting the withdrawn US notifications – see below) is 770,000 tonnes, about the same as proposed last year. However, in the current season the total krill catch looks likely to be only just over 100,000 tonnes.

The proposed catch is well over the current catch limit in the South Atlantic of 620,000 tonnes. Some of the proposals are looking at fishing in the Indian Ocean sector of CCAMLR, where there has been no fishing by commercial vessels since 1994 - catches then were less than 1,000 tonnes.

Last year the Cook Islands proposed seven vessels to go pair trawling for krill, but they withdrew the proposal. This year they are proposing only one vessel, the *Hannover*, which used to be known as the *San Liberatore*. It fished in New Zealand waters before it migrated to the Cook Islands registry and has fished most recently in the Atlantic.

Norway has proposed to develop an exploratory fishery around Bouvet Island in the South Atlantic (CCAMLR area 48.6) after a survey was carried out by joint German and Norwegian research crews. This will require CCAMLR approval of the research and data collection regime. A proposal by some Russian operators to fish west of the Antarctic Peninsula in CCAMLR area 88.3 is understood to be withdrawn.

To date only nine vessels have been licensed by their countries to fish for krill this year in CCAMLR waters. This compares to 14 vessels left after the withdrawal of the Cook Islands and Vanuatu krill proposals during the 2007 CCAMLR meeting.

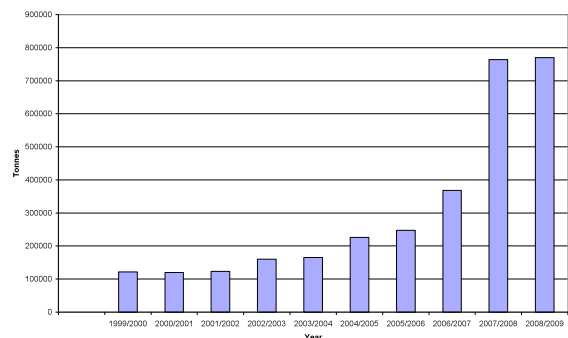


Fig: Annual krill notifications 1999-2008

Some of the notified vessels will have to undergo conversion before they can fish for krill. The Norwegians have notified the *Thorshovdi*, which is currently a general cargo ship called the *Vlieborg*. This is the largest vessel proposed to go fishing at 134m. Another Norwegian nomination, the *Juvel*, has recently had 26 m added to its length and has now gone fishing for krill.

Other vessels were expected to undergo conversion to fish for krill. This included the *Atlantic Navigator* until the recent decision by Norwegian interests to withdraw it from krill fishing.

The United States has withdrawn its notification to CCAMLR for four trawlers (120,000 tonnes). Officials said the withdrawals were due to problems associated with completing the transfer of registry of the vessels to the United States. This leaves the US with one notification for the coming season.

The US is not a new krill fisher. The US-flagged vessel *Top Ocean* fished for krill between 2000 and 2004, catching nearly 36,000 tonnes over this period, with the largest catch of 12,175 tonnes in 2002. According to the US notification, the vessel's owners propose to catch 40,000 tonnes next year.

Top Ocean is a company based in Kodiak (Alaska) and was the first US company to focus on krill fishing. Top Ocean is looking at aquaculture feed as well as krill oil for nutraceuticals. They also sell frozen krill for human consumption.

The four vessels whose notifications have been withdrawn are from the SeaHavn Group Ltd, which are currently owned by Greek interests and flagged to Vanuatu. They have been fishing for jack mackerel in the high seas off the Chilean coast for several years.

These vessels are four sister ships (*Frey, Frigg, Odin, and Thor*), which are 105 m long and were originally proposed to fish for krill this year under a Vanuatu flag. However, that notification was withdrawn during the CCAMLR meeting last year.

SeaHavn Group Ltd is the wholly-owned Bahamas Subsidiary of SeaHavn Corporation. James Wexler is the

Chairman, CEO and the founder of SeaHavn Ltd and has been a participant in the fishing industry for well over 20 years.

SeaHavn has been looking at purchasing four 105 m trawlers since 2005 to fish for jack mackerel, krill and other pelagic species. SeaHavn also operates fishing licenses within the EEZ of Mauritania in the Atlantic. In 2006 it sold eight of the thirteen 62 metre pelagic trawlers that it operated in this fishery.

Restructuring Hits Aker

A range of changes have been going on at Norwegian-based krill fisher Aker Seafood and Aker BioMarine in the last 2 months.

Several senior managers have left or been replaced at Aker Biomarine. First to go was former President and CEO, Helge Midttun, who was replaced in the interim by Inge Rokke, who is Aker's main shareholder. Aker ASA is the largest shareholder in Aker BioMarine with 76.3 percent of the shares.

Next to go at Biomarine were the Chief Financial Officer, Nils Brendemo, and Vice-President for Aqua and Animal Business Activities, Sjur Tvelte. The new financial officer is Aaron Kramer who was a Vice President in Charge of Business and Development Strategy.

Another change is that current fishing activity in the Faeroes and Argentina will be separated and set up as a separate company so that Aker BioMarine can focus on krill.

Aker BioMarine is also moving away from its focus on concentrating fish oils and instead focusing on krill harvesting and processing. It is also proposed that Aker's Centre for Lipid Technology at

Hovodebygda will be spun off as a separate company or closed down. The joint venture O3C nutraceuticals will be sold - the joint venture partner is GC Rieber.

To further concentrate its efforts, Aker Biomarine is selling the *Atlantic Navigator* to Aker ASA for US\$100 million and will concentrate on the *Saga Sea*. The *Atlantic Navigator* was to be converted to krill fishing and renamed the *Antarctic Navigator*. This vessel is in this year's krill notification by Norway to CCAMLR, with a proposed catch of 50,000 tonnes.

Aker Biomarine has stated that the *Saga Sea* has sufficient capacity to produce enough krill meal, krill oil, and the newly developed krill powder product for all of its current market needs. It is proposing to catch 50,000 tonnes of krill next year. These changes will mean that Aker will not require any additional injection of capital.

The *Saga Sea* will process catch on board and produce krill powder and tablets. The product is concentrated Omega-3 phospholipids and is in addition to their krill oil product *Superba*.

BioMarine is also proposing to concentrate sales effort on a few large partners. In Scandinavia this involves a marketing agreement with *Life Europe*, which has 600 shops and outlets which can sell krill oil.

Early next year Aker is proposing to market its new krill powders to US consumers.

Neptune's Krill Sales Increase

Canadian-based krill oil developer Neptune Technologies and Bioresources

has reported increased sales in its latest annual report. While sales increased by 26 percent to US\$9.6 m, the company's loss increased to US\$4.5m.

The Company reported increased sales volume of 54% but this was affected by devaluation of the US dollar.

The main reason for the loss was an increase in the stock-based compensation charge, which rose to US\$4.2 m. The annual report estimates that aside from the compensation charge, mainly on stock options, and unfavourable changes in the US dollar, the company would have made a profit. Overall the company's long-term debt declined.

In early September the company announced a new financing arrangement with US Investment banker Desjardins Group, which will provide up to US\$8 million in financing. These funds are to be used to improve productivity and increase production capacity to meet growing demand.

About US\$2.8 million is to be used to purchase new equipment to double annual production of Neptune Krill oil to 120 tonnes per year.

The company is proposing to further expand within two years with a partnership with a leading industrial manufacturing company. According to Neptune this would allow it "to respond to the growing demands of its dietary supplement and functional food customers as well as pharmaceutical customers and strategic partners."

According to Neptune, the high-end marine Omega-3 market is growing by 20-30 percent annually.

As part of its current expansion plans, Neptune has launched a new product containing krill oil with its distributor

Schiff Nutrition International. The product Schiff MegaRed is being marketed through Walgreens pharmacy chain in the US. The chain operates 6,400 stores in the US.

Enzymotec Launches Lower-Priced Krill Oil Product

The Israeli nutraceutical company Enzymotec has released a new, cheaper krill oil product aimed at a market for lower priced oil while maintaining its existing high-value product.

Enzymotec has been in an expansion phase over the last year with moves into markets in the US and Europe. This has led it into competition with Canadian-based krill oil developer Neptune Technologies and Bioresources.

The company has developed a range of lipids-based products that focus on human health benefits. The company both sells the krill oil formulations as well as including it in its own products.

Last year the company spent US\$3.5 million in research and development.

US Moves To Ban Domestic Krill Fishing

The US National Marine Fisheries Service is considering an outright ban on krill fishing in the EEZ off the Pacific coasts of California, Oregon and Washington. There is a current ban on krill fishing in Californian state waters out to 3 nautical miles offshore.

There are no large-scale krill fisheries operating in this area. The US is acting on concern from researchers that a reduction in krill numbers would impact a wide range of marine life including

whales, seabirds and a range of fish species including salmon, squid and hake.

The prohibition is likely to be in place by the end of the year.

Apart from the Antarctic, the only other krill fishery occurs off Japan.

Disclaimer: *The material in this newsletter is intended to assist people in understanding the nature of the krill industry. While we try to ensure that information is accurate and up to date, the Antarctic and Southern Ocean Coalition gives no warranty as to its accuracy.*

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