Vacuuming Antarctica for Krill

THE CORPORATIONS PLUNDERING THE EARTH’S LAST FRONTIER
Executive Summary

Around the world, growing demand for farmed fish and omega-3 health supplements is coming at a hidden cost – the Antarctic, and one of the last unspoiled oceans on the planet. In a quest to exploit the “pink gold” of Antarctica’s krill as a raw input into both fish farming and omega-3 supplements, this pristine environment and its whales, penguins, seals and birds are dangerously threatened.

But it doesn’t need to be this way – and it’s time for the companies threatening the Antarctic to hear this message.

After depleting many of the world’s oceans of their fish, companies are now going after what’s left at the bottom of the food chain – krill. Using giant industrial factory-ships, seafood companies are literally vacuuming the oceans by sucking up the krill that other marine creatures depend on. Simultaneously, Antarctic ice is melting due to climate change, depleting the krill’s ice algae food source. The end result is that since the 1970s, the krill population has already dropped by 80%. In turn, research now shows that Antarctic penguin populations, which depend on krill, have collapsed by 50% in studied colonies over the last 30 years.\(^1\)

With climate change accelerating, pressure will relentlessly increase on this delicate wildlife ecosystem. Plundering krill in an already-threatened ecosystem is reckless in the extreme.

This exploitation is ultimately dependent on a market for krill-based products. Currently, this route to market is provided by a number of major retailers, including Walmart, Target, CVS, and Walgreen’s. These companies continue to sell krill products despite clear contradictions with their own sustainability commitments. Our message to these companies is simple: Stop supporting the dangerous exploitation of Antarctic krill. Take the krill off your shelves, and leave it for the penguins and the Antarctic ecosystem.

Now that seafood companies have depleted much of the world’s oceans, they are going after what’s left at the bottom of the food chain – krill.

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\(^1\) Trivelpiece et al. (2011, March 11). Variability in krill biomass links harvesting and climate warming to penguin population changes in Antarctica. Retrieved from: http://www.pnas.org/content/108/18/7625.full
**Krill trawling can be detrimental to penguin survival**
The waters surrounding Antarctica are still relatively untouched by human activity. These waters are home to almost 10,000 species, many not found anywhere else on the planet. Krill are at the heart of this pristine ecosystem. This tiny crustacean plays a crucial role in the ocean food chain, feeding the whales, penguins, seals and birds living in or visiting the waters of Antarctica. Krill is the foundation of this marine wilderness, providing over 96% of the caloric needs of seabirds and marine mammals.

But this foundation is now threatened by both climate change and krill fishing, putting this vibrant and magnificent natural world at serious risk. In the 1970s, there were huge quantities of krill in the Antarctica. But with krill heavily dependent on ice algae to survive, shrinking sea ice and warming waters have reduced krill swarms to a fraction of their former size. Scientists calculate that krill populations have dropped 80% since the 1970s. Krill fishing and ocean acidification induced by climate change now threaten what is left.

Krill are also a vital and underappreciated contributor to the global ecosystem, helping to hold global warming in check, as their vast schools transport carbon dioxide from the surface waters to the deep. Declining krill numbers will therefore accelerate the climate change that is already warming the surface waters to the deep. The threat has been recognized and some leaders are acting. In 2010, California banned fishing for krill in state waters. The law was a precautionary action designed to protect the valuable commercial species which feed on krill before it was too late. The same year the supermarket chain Whole Foods Market showed courageous leadership by withdrawing krill products from its shelves, citing a decline in predatory sea animals – whales, penguins and seals – in its decision.

Unfortunately for krill, and the species dependent on it, this tiny crustacean is highly valuable for corporations that want it both as a food source for fish farms and for its omega-3 fatty acids. Massive growth is forecast for aquaculture, and the human nutrition krill market is growing more than 40% per year. Because other fish species have been exhausted, big business is now using industrial-scale trawling of krill at the bottom of the food chain to satisfy their need for this raw material.

To feed this demand, seafood companies have invested in gigantic vessels equipped with new technology that literally vacuum the ocean for krill, sucking up massive volumes at unpredicted rates. China’s clear intention to boost its krill harvest has raised concerns about the rapidly expanding catches, which are “outstripping our ability to orderly manage it”, as an advisor to the Australian government described the situation. Recently, China and Russia vetoed a proposal to establish Marine Protected Areas where no fishing would be allowed.

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Right now, the magnificent oceans surrounding the Antarctic remain relatively untouched by human activity. But urgent action by consumers is needed to keep it that way.

References:
Krill feeds the marine ecosystem. Take out the bottom, and the top collapses, too.
The Corporations and Countries Plundering Antarctica’s Krill

In February of each year, the fleet of krill fishing ships set off for Antarctica for their 6 month season. These so called “ships” are more like floating industrial factories, many exceeding 120 meters in length and with the ability to vacuum the ocean for krill and then process it onboard. The krill fleet’s capacity to harvest the “pink gold” of Antarctica’s krill is exploding, with the total hold capacity of licensed ships rising 44% in just the last two years.

Companies from Norway, China, South Korea, Japan and Chile dominate krill fishing. Fishing in Antarctic waters is regulated by CCAMLR, The Commission for the Conservation of Antarctic Marine Living Resources. The key krill-fishing countries are all among the 25 members of CCAMLR, but due to a consensus-based decision process, a single country can veto any decision proposed within CCAMLR.

A number of member countries have been attempting to establish Marine Protected Areas in the Southern Ocean for every year, but decisions have consistently been vetoed by members with significant fishing operations. In 2012, after the proposal had been vetoed, Greenpeace announced that “This year, CCAMLR has behaved like a fisheries organization instead of an organization dedicated to conservation of Antarctic waters.” In 2014, Russia and China vetoed the fourth attempt to protect the Antarctic waters from fishery.

Today, most krill is used as aquaculture fish feed, but the new omega-3 market is growing rapidly and krill is becoming increasingly popular as a raw material for these dietary supplements.

Ironically, the remoteness and wildness of krill is used as a sales pitch in marketing these supplements, with marketers telling consumers that it comes from “the purest waters on Earth.” As well as pure, krill is sometimes marketed as “abundant” and the fishing as “sustainable”. With retailers that consumers trust continuing to stock these products, and a lack of quality information readily accessible, most consumers are unaware of the effects that these products have on penguins and other Antarctic species.

Unfortunately, scientists and regulators currently lack access to quality information on how much krill currently exists in Antarctic waters. The last survey of krill populations was conducted fourteen years ago, and estimates differ by hundreds of millions of tons. This makes certifications obtained by some krill fisheries very questionable, a fact that has been pointed out by scientists and NGOs, with Greenpeace strongly advising against any certification of krill fisheries.

Aker Biomarine, a Norwegian fishery and biotech company, is the biggest supplier of krill oil. This year the company is building a new production plant, and has recently started a campaign aimed at medical practitioners that promotes the health benefits of krill. Aker Biomarine has its own krill brands, but krill from Aker’s vessels also supply other large brands, such as MegaRed, owned by Reckitt Benckiser, and Barlean’s Wild & Whole Krill Oil. Other brands, like Nature’s Bounty, owned by NBTY, do not reveal the supplier of the krill oil used in their products.

But the bottom line is this: All key suppliers of krill oil source their raw materials from the same place, the pure and increasingly-threatened ocean ecosystem surrounding Antarctica. With krill numbers collapsing, exploitation of this crucial part of the Antarctic ecosystem needs to end.
While the killing of Antarctica’s whales has largely stopped, corporations are now taking their crucial food sources.
The Companies That Could Save Antarctica and its Krill

In recent years, a number of corporations are increasingly moving beyond “greenwashing” and making genuine attempts to improve the sustainability of their supply chains. On krill, Whole Foods Market has led the way, pulling krill-based products from their shelves and acknowledging that krill was a vital food source for Antarctica’s wildlife.

Now, it’s time for the biggest and most powerful retailers to step up on krill, too. Many of these major retailers have articulated commitments to sustainability and addressing climate change but, at the same time, they continue to be some of the largest sellers of krill-based products. In doing so, they are actively supporting the companies that extract krill from the ocean and threaten the Antarctic ecosystem.

Target, CVS, Walmart, and Walgreens are all such companies, where the gap between their articulated commitments and actual practices are gaping. All have sustainability policies that should oblige them not to sell krill products. It’s time for them to take their responsibilities – and their own policies – seriously.

**Target**

REVENUE: US$ 72.596 billion (2013)
PROFILE: Second largest general merchandise retailer in the USA
LOCATIONS: 1,916
EXAMPLES OF KRILL PRODUCTS AVAILABLE:
- MegaRed (Schiff)
- Swisse Krill Oil
- Nature’s Bounty (NTBY)
- Up&Up
SUSTAINABILITY CLAIMS:
“Healthy oceans are critical to a healthy planet, so our goal is to make our entire fresh and frozen seafood selection sustainable and traceable…”
“…we’ll make progress by continuing to buy from suppliers who source responsibly and working with our partners to encourage the best supply-chain practices.”

**CVS pharmacy**

REVENUE: US$ 126.761 billion (2013)
PROFILE: As part of CVS Health, the largest integrated pharmacy company in the USA
LOCATIONS: 7,800
EXAMPLES OF KRILL PRODUCTS AVAILABLE:
- Sundown Naturals (owned by NTBY)
- MegaRed (Schiff)
- Barleans Wild & Whole Krill Oil (Barleans)
- Botanic Choice Red Krill Oil (Botanic Choice)
- CVS Omega-3 Krill Oil
- Nature’s Lab Antarctic Krill Oil (Nature’s Lab)
SUSTAINABILITY CLAIMS:
“Long before a product hits our store shelves, it goes through a rigorous process to identify and assess potential risks to the environment.”
“We also consider the need to meet the changing demands of consumers who want more environmentally preferable products.”

**Walgreens**

PROFILE: The largest drug retailing chain in the USA
LOCATIONS: 8,308
EXAMPLES OF KRILL PRODUCTS AVAILABLE:
- Nature’s Bounty (NTBY)
- Finest Nutrition
SUSTAINABILITY CLAIMS:
“Environmental sustainability is part of Walgreens’ commitment to help our customers live well, stay well and get well…”
“…we will continue to find ways to lead in this space.”

**Walmart**

REVENUE: US$ 476.294 billion (2013)
PROFILE: Largest retailer in the world
LOCATIONS: 11,088
EXAMPLES OF KRILL PRODUCTS AVAILABLE:
- MegaRed (Schiff)
- Equate
- Spring Valley
SUSTAINABILITY CLAIMS:
“Environmental sustainability has become an essential ingredient to doing business responsibly and successfully. As the world’s largest retailer, our actions have the potential to save our customers money and help ensure a better world for generations to come.”

ACCORDING TO THE MEGARED HOME PAGE, COMPANIES THAT SELL THEIR KRILL PRODUCTS INCLUDE:
- The Vitamin Shoppe
- Lucky Vitamin
- Costco
- Sam’s Club
- Kroger
- BJ’s Wholesale Club
- Safeway
- Meijer
- Rite-Aid
- Publix
- Fred Meyer
- Shopko
- Core-Mark
- American Sales Company
- Wakefern
The destruction of Antarctica’s krill – and the ecosystem the krill sustains – is not inevitable and is entirely unnecessary. In both the omega-3 and aquaculture markets, clean alternatives already exist and are available for us. These alternatives are of two main types: Taking inputs from fisheries that are in fact sustainable, and using the plant-based inputs that are rapidly growing in availability.

In omega-3 markets, a number of sustainable fish-based and plant-based alternatives already exist that provide the same fatty acids as Antarctic krill. These products are often fairly new, but progressive companies have already taken them to market and are rapidly increasing their scale.

Four years ago, Whole Foods led the way and courageously took krill products off their shelves. In doing so they acknowledged that “krill are an important source of food for marine animals including penguins, seals, and whales in the Antarctic,” and noted that there are observed “declines of some predator populations in the areas where the krill fishery operate”.

In March 2014, Whole Foods UK started selling Tom Oliver Nutrition’s omega-3 MOPL™ Herring Caviar. In a press release, Tom Oliver Nutrition explained the rationale for developing the product: “Following concerns of retailers and environmental groups over the sustainability of krill-based omega-3s, Tom Oliver Nutrition has harnessed the widespread health benefits of phospholipid omega-3 in an environmentally friendly way from Herring caviar.” In October 2014, Nordic Naturals, a leading fish oil brand in US, launched the herring roe-based omega-3 Phospholipids™ as an alternative to krill oil products. There are also vegetarian, algae-based omega-3 products that provide a clear alternative to krill-based products.

In response to a draft of this report, Trader Joe’s has also clarified in writing that they do not and have no plans to stock krill-based products. They have also had their name removed from the website of MegaRed, where they were listed as a krill oil retailer.

It is increasingly clear that it is not necessary to risk Antarctica by vacuuming up its diminishing krill, and that existing market demand can be met with sustainable alternatives. So why take that risk? It’s time for some of the largest retailers of krill-based products – companies like CVS, Target, Walgreens and Walmart – to follow the lead of Whole Foods by ending the sale of Antarctic krill oil, adopting a corporate policy against the sale of such products, and helping us all to protect the great wilderness of Antarctica while we still can.

**Easy Alternatives that Don’t Cost Antarctica**

We have two immediate demands of sustainable retailers:
1. Stop selling all Antarctic krill oil products
2. Adopt a corporate policy against the sales of all Antarctic krill oil products

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