

# MARINE ECOSYSTEMS *and* Management

*International news and analysis on marine ecosystem-based management*

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## **Krill, the Antarctic Ecosystem, and CCAMLR**

The multinational effort to protect the vast resources of the Antarctic marine environment is often cited as among the best working examples of marine EBM. This regional initiative is under the auspices of the Convention on the Conservation of Antarctic Marine Living Resources, which came into force in 1982 ([www.ccamlr.org](http://www.ccamlr.org)). Among other aspects, the treaty is notable for its embrace of the precautionary approach and the need to consider ecological links between species as part of management — the “ecosystem approach”. Under the treaty, cooperative management is overseen by the Commission on the Conservation of Antarctic Marine Living Resources (CCAMLR), which includes representatives of 25 governments.

Original negotiations on the treaty arose from concerns that an increase in krill catches in Antarctic waters, back in the 1970s, could harm those populations of krill and the species that preyed on them, including birds, seals, and fish. A quarter-century later, as CCAMLR has made substantial progress in its management of Antarctic marine resources in general, the krill fishery continues to pose challenges. Although CCAMLR is revising its krill management to reflect ecological science, conservationists say that recommendations from the CCAMLR’s Scientific Committee are being influenced by political and economic interests.

“CCAMLR has established krill catch limits for some areas of the Southern Ocean but these do not adequately account for the relationships between krill, predators, and the fishery, which occur at much smaller scales,” says Rodolfo Werner, Science Advisor for the Antarctic Krill Conservation Project ([www.krillcount.org](http://www.krillcount.org)), an international initiative supported by the Pew Environment Group. “Aware of this situation, CCAMLR has pledged to develop an adaptive management system based on small scale management units (SSMUs) — not only to account for these relationships but also to consider the effect of climate change. However, consensus has not been reached on the approach for an initial establishment of krill catch limits at the SSMU level, despite the substantive ongoing work of CCAMLR’s technical bodies.” In addition, says Werner, CCAMLR should increase its efforts to implement comprehensive monitoring of krill-dependent predator colonies on land, using the predators as indicator species to distinguish the effects of fishing from the effects of climate change.

A main obstacle to managing the krill fishery has been disagreement among CCAMLR members on whether to require full scientific observer coverage on krill fishing vessels. Virginia Gascón, Policy Advisor for the Antarctic Krill Conservation Project, says such a measure would provide CCAMLR’s Scientific Committee with the information it needs to help develop the SSMU-based catch limits. At a recent CCAMLR meeting, nations active in the krill fishery, including Japan and South Korea, opposed the requirement for observers.

“We understand that implementing ecosystem-based management is a long process, and CCAMLR is doing substantive work in the right direction,” says Gascón. “This process will suffer, though, if the scientific work of the organization is politicized. Scientific advice should be independent from political or economic interests. Without this, true EBM or EBFM will be impossible to implement.”

### **CCAMLR map**

For a map of the CCAMLR Convention area and a description of its boundaries, go to [www.ccamlr.org/Pu/e/conv/map.htm](http://www.ccamlr.org/Pu/e/conv/map.htm)

### **For more information**

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