



# THE WILDLIFE SOCIETY

*Leaders in Wildlife Science, Management and Conservation*

## **Final Position Statement**

### **The Antarctic**

The Antarctic continent and surrounding Southern Ocean support unique terrestrial ecosystems and some of the world's most biologically productive neritic and pelagic food webs. At the base of the pelagic food web is the Antarctic krill, a planktonic crustacean, with an estimated productivity of several billion tons annually. Krill, either directly or indirectly, provide food for the majority of whales, seals, fish, squid, and seabirds that breed in or migrate to the Southern Ocean each year. Small-scale krill fisheries were first established in the 1960s, with several more initiated in the 1980s. Catches throughout the 1990s averaged around 100,000 tons annually, but have increased in recent years in response to worldwide demand for more protein coupled with advances in technology, prompting concerns about the sustainability of these fisheries, especially in light of climate change

In the neritic system, toothfish (a key prey species of seals and Orca whales) and minke whales are currently the subjects of exploitation. In 1986, the International Whaling Commission placed a moratorium on commercial minke whaling, although the mammals may be killed for research purposes. Japan continues to harvest minke whales under this exception, with annual catches around 500 between 1995 and 2008. Fisheries for the Antarctic toothfish (also called Antarctic cod) and Patagonian toothfish (also called Chilean Seabass) are regulated by the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR). Both are currently harvested, but there are concerns that the illegal catch far outweighs that permitted by the CCAMLR and could jeopardize the sustainability of both species.

In both pelagic and neritic systems, overharvesting could have serious ecological consequences with cascading effects on the food web. A significant amount of research focused on understanding krill and the pelagic ecosystem is currently underway. In contrast, much less is known about the structure and function of Antarctic neritic food webs, of which the Ross Sea (perhaps the last unaltered marine ecosystem on Earth) is the most productive south of the Polar Front. A sound understanding of the structure and function of the neritic and pelagic ecosystems should be a prerequisite to commercial harvest of Antarctic organisms.

The Antarctic is also rich in mineral resources including coal, oil, uranium, and iron. As demands for fuel and raw materials increase, economies associated with exploration and exploitation of these resources will likely become more favorable, and more nations may look to the globe's most southerly continent for natural resources. Additional information on the distribution of all mineral resources and the potential for conflicts between their extraction and biological resources (e.g., breeding and haul-out locations of wildlife) is required before exploitation begins. Though mineral extraction activities are currently prohibited until 2048, geo-exploratory activities are ongoing as part of various nation's research programs.

As of 2009, the Antarctic Treaty, which came into force in 1961, has 47 signatories from 28 Consultative Parties that collectively govern the Antarctic continent as a scientific preserve. The Convention for the Conservation of Antarctic Marine Living Resources was established in 1980 to monitor and control all fisheries in the Southern Ocean south of 60°S, with the exception of whales which are the purview of the International Whaling Commission. The Protocol on Environmental Protection to the Antarctic Treaty (1991) reaffirmed the protection of the Antarctic continent, but not of the surrounding oceans, as a reserve for science and provided for the establishment of Antarctic Specially Protected Areas.

Increasing demands for resources will fuel disputes and thus, Antarctica provides an outstanding challenge and opportunity for cooperation of the international community for the common good rather than benefits for a few.

The policy of The Wildlife Society, in regard to the Antarctic, is to:

1. Support the Antarctic Treaty System and all associated and subsequent agreements pertaining to conservation of Antarctic terrestrial ecosystems and the Southern Ocean.
2. Recognize the intrinsic values of Antarctica and the Southern Ocean, and support their use for long-term scientific research to identify the extent of human's impacts including but not limited to fishing impacts, the ozone hole, and global climate change. Investigations of the Antarctic ecosystems are critical before exploitation of living or mineral resources is permitted.
3. Recommend that the natural and historic values of Antarctica and the Southern Ocean be preserved to the greatest extent possible by establishing reasonable controls for potential extractive (e.g., the harvest of living resources, mineral extraction) and non-extractive (e.g., tourism) activities.

Approved by Council September 2009. Expires October 2018.