

## DEPARTMENT OF THE INTERIOR

## Fish and Wildlife Service

## 50 CFR Part 17

[FWS-R7-ES-2008-0038; 1111 FY07 MO-B2]

RIN 1018-AV19

**Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Polar Bear (*Ursus maritimus*) Throughout Its Range**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), determine threatened status for the polar bear (*Ursus maritimus*) under the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.). Polar bears evolved to utilize the Arctic sea ice niche and are distributed throughout most ice-covered seas of the Northern Hemisphere. We find, based upon the best available scientific and commercial information, that polar bear habitat—principally sea ice—is declining throughout the species' range, that this decline is expected to continue for the foreseeable future, and that this loss threatens the species throughout all of its range. Therefore, we find that the polar bear is likely to become an endangered species within the foreseeable future throughout all of its range. This final rule activates the consultation provisions of section 7 of the Act for the polar bear. The special rule for the polar bear, also published in today's edition of the **Federal Register**, sets out the prohibitions and exceptions that apply to this threatened species.

**DATES:** This rule is effective May 15, 2008. The U.S. District Court order in *Center for Biological Diversity v. Kempthorne*, No. C 08–1339 CW (N.D. Cal., April 28, 2008) ordered that the 30-day notice period otherwise required by the Administrative Procedure Act be waived, pursuant to 5 U.S.C. 553(d)(3).

**ADDRESSES:** Comments and materials received, as well as supporting scientific documentation used in the preparation of this rule, will be available for public inspection, by appointment, during normal business hours at: U.S. Fish and Wildlife Service, Marine Mammals Management Office, 1011 East Tudor Road, Anchorage, AK 99503. Copies of this final rule are also available on the Service's Marine Mammal website: <http://alaska.fws.gov/fisheries/mmm/polarbear/issues.htm>.

**FOR FURTHER INFORMATION CONTACT:**

Scott Schliebe, Marine Mammals Management Office (see **ADDRESSES** section) (telephone 907–786–3800). Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339, 24 hours a day, 7 days a week.

**SUPPLEMENTARY INFORMATION:****Background**

Information in this section is summarized from the following sources: (1) The Polar Bear Status Review (Schliebe et al. 2006a); (2) information received from public comments in response to our proposal to list the polar bear as a threatened species published in the **Federal Register** on January 9, 2007 (72 FR 1064); (3) new information published since the proposed rule (72 FR 1064), including additional sea ice and climatological studies contained in the Intergovernmental Panel on Climate Change (IPCC) *Fourth Assessment Report* (AR4) and other published papers; and (4) scientific analyses conducted by the U.S. Geological Survey (USGS) and co-investigators at the request of the Secretary of the Department of the Interior specifically for this determination. For more detailed information on the biology of the polar bear, please consult the Status Review and additional references cited throughout this document.

**Species Biology****Taxonomy and Evolution**

Throughout the Arctic, polar bears are known by a variety of common names, including nanook, nanuq, ice bear, sea bear, isbjörn, white bears, and eisbär. Phipps (1774, p. 174) first proposed and described the polar bear as a species distinct from other bears and provided the scientific name *Ursus maritimus*. A number of alternative names followed, but Harington (1966, pp. 3–7), Manning (1971, p. 9), and Wilson (1976, p. 453) (all three references cited in Amstrup 2003, p. 587) subsequently promoted the name *Ursus maritimus* that has been used since.

The polar bear is usually considered a marine mammal since its primary habitat is the sea ice (Amstrup 2003, p. 587), and it is evolutionarily adapted to life on sea ice (see further discussion under General Description section). The polar bear is included on the list of species covered under the U.S. Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 et seq.) (MMPA).

Polar bears diverged from grizzly bears (*Ursus arctos*) somewhere between

200,000 and 400,000 years ago (Talbot and Shields 1996a, p. 490; Talbot and Shields 1996b, p. 574). However, fossil evidence of polar bears does not appear until after the Last Interglacial Period (115,000 to 140,000 years ago) (Kurten 1964, p. 25; Ingolfsson and Wiig 2007). Only in portions of northern Canada, Chukotka, Russia, and northern Alaska do the ranges of polar bears and grizzly bears overlap. Cross-breeding of grizzly bears and polar bears in captivity has produced reproductively viable offspring (Gray 1972, p. 56; Stirling 1988, p. 23). The first documented case of cross-breeding in the wild was reported in the spring of 2006, and Wildlife Genetics International confirmed the cross-breeding of a female polar bear and male grizzly bear (Paetkau, pers. comm. May 2006).

**General Description**

Polar bears are the largest of the living bear species (DeMaster and Stirling 1981, p. 1; Stirling and Derocher 1990, p. 190). They are characterized by large body size, a stocky form, and fur color that varies from white to yellow. They are sexually dimorphic; females weigh 181 to 317 kilograms (kg) (400 to 700 pounds (lbs)), and males up to 654 kg (1,440 lbs). Polar bears have a longer neck and a proportionally smaller head than other members of the bear family (Ursidae) and are missing the distinct shoulder hump common to grizzly bears. The nose, lips, and skin of polar bears are black (Demaster and Stirling 1981, p. 1; Amstrup 2003, p. 588).

Polar bears evolved in sea ice habitats and as a result are evolutionarily adapted to this habitat. Adaptations unique to polar bears in comparison to other Ursidae include: (1) White pelage with water-repellent guard hairs and dense underfur; (2) a short, furred snout; (3) small ears with reduced surface area; (4) teeth specialized for a carnivorous rather than an omnivorous diet; and (5) feet with tiny papillae on the underside, which increase traction on ice (Stirling 1988, p. 24). Additional adaptations include large, paddle-like feet (Stirling 1988, p. 24), and claws that are shorter and more strongly curved than those of grizzly bears, and larger and heavier than those of black bears (*Ursus americanus*) (Amstrup 2003, p. 589).

**Distribution and Movements**

Polar bears evolved to utilize the Arctic sea ice niche and are distributed throughout most ice-covered seas of the Northern Hemisphere. They occur throughout the East Siberian, Laptev, Kara, and Barents Seas of Russia; Fram Strait (the narrow strait between northern Greenland and Svalbard),