

FREQUENTLY ASKED QUESTIONS

What action did the Secretary of the Interior take concerning the polar bears?

The Secretary has listed the polar bear as a threatened species worldwide under the Endangered Species Act (ESA) due to range-wide declines in sea ice, a critical aspect of the polar bear's habitat.

What is the basis for the Secretary's decision that the polar bear should be listed as threatened?

The U.S. Fish and Wildlife Service (Service/FWS) conducted an extensive review of the best available scientific and commercial information concerning sea ice habitat, climate change, and the variety of other threats potentially affecting polar bears. The review included nine peer-reviewed reports prepared by the United States Geological Survey (USGS) addressing issues central to the Service's listing decision as well as many related scientific studies. That science led the Service to make a "threatened" listing recommendation to the Secretary. After receiving an additional "threatened" listing recommendation by the Assistant Secretary for Fish and Wildlife and Parks as well as personally reviewing the materials and meeting with the heads of the FWS and the USGS, the Secretary concurred in the recommendations.

Why were polar bears listed as "threatened" rather than "endangered?"

A "threatened species" is any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The best available scientific information indicates that the polar bears are not currently in danger of extinction throughout all or a significant portion of their range. Over the last few decades, overall polar bear numbers have increased because of international efforts to curtail hunting of the bears. Within the foreseeable future, however, the best available information indicates that polar bears are likely to become an endangered species given the projected decline in sea ice used by the bears. This is the definition of a "threatened" species, and thus a "threatened" classification is the proper classification for polar bears worldwide at this time.

How does loss of sea ice affect polar bears?

Polar bears are dependent upon Arctic sea-ice habitat for survival during much of their lifecycle. They use sea ice as a platform from which to hunt and feed upon seals, as a habitat on which to seek mates and breed, and as a way to move long-distances relatively quickly. Polar bears use the sea ice to travel to and from their denning areas, as well as occasionally for maternity denning itself. Most populations, however use terrestrial habitat partially or exclusively for maternity denning. Long distance swims to reach pack ice or land can also place polar bears in potentially hazardous conditions. The result can reduce individual survival and consequently reduce populations.

In the winter, seals depend on holes or cracks in the ice to surface and breathe between long periods of swimming underwater. They also use small openings just under the surface of the ice

for shelter. Bears anticipate this and generally catch their prey at those times. As the sea ice melts, the summer season becomes a fasting time for polar bears. Seals have increasing options to reach the surface without encountering a bear and at the same time the bears are losing their advantage to wait and rest at places seals must visit. As a consequence, polar bears are forced onto ice over deeper, less productive Arctic waters where seals are less likely to occur or even onto land where their food supply is extremely limited or non-existent. While this summer fasting cycle is a component of polar bear life history, as the ice melts earlier in the summer and re-freezes later in the fall, the bears must fast for progressively longer periods.

Why will polar bears have difficulty adapting to their changing environment?

Bears are generally adaptable. However, polar bears, the largest of the bear species, differ from all other bear species by specializing in a high-calorie, carnivorous diet. Their size, increased fat storage capability, and minimized heat loss make them uniquely suited for the Arctic environment. The decline of sea ice decreases the access to their principal food supply and increases the amount of energy that bears must expend to reach the seals they do consume. The high fat content of seals helps them maintain their body size and their survival in the numbers we see today. No suitable alternative food source exists on land and, in some situations, a limited food supply has even led some polar bears to prey on their own species. Additionally, while species can and do adapt to changing environments, the time frame at which adaptation typically occurs is longer than the time frame in which polar bears are currently expected to experience dramatic loss of habitat.

About Polar Bears

Where do polar bears live?

Polar bears occur throughout most ice-covered seas in the Arctic; however, they are not evenly distributed throughout their range. They are generally found near the shore in shallow water, and in areas where ocean conditions bring nutrient-rich water near the surface and keep the ice from becoming too thick in winter. Over most of their range, male polar bears remain on the sea ice nearly year-round.

What is the current status of the world's polar bear population?

The population of bears has grown from a low of about 12,000 in the late 1960's to a current worldwide estimate of 20,000-25,000 as the result of various international efforts to conserve the species. The International Union for Conservation of Nature (IUCN), Polar Bear Specialist Group (PBSG) has identified 19 management units for the polar bear; however, within these management units polar bears are not evenly distributed.

What is the current status of individual polar bear populations?

There are 19 polar bear management units identified by the International Union for Conservation of Nature (IUCN) Polar Bear Specialist Group (PBSG). Two of these polar bear populations are increasing (Viscount Melville Sound and M'Clintock Channel, which are recovering from excess harvest prior to 1980); six populations are stable (Northern Beaufort Sea, Southern Hudson Bay, Davis Strait, Lancaster Sound, Gulf of Boothia, Foxe Basin); five populations are declining (Southern Beaufort Sea, Norwegian Bay, Western Hudson Bay, Kane Basin, Baffin Bay); and for the remaining six populations, data are inconclusive (Barents Sea, Kara Sea, Laptev Sea, Chukchi Sea, Arctic Basin, East Greenland) with no estimate of trend. The two populations with the best data, Western Hudson Bay and Southern Beaufort Sea, are both considered to be declining due to loss of sea ice.

Protection under the Endangered Species Act

What steps led to the listing of the polar bear as threatened under the ESA?

The Service received a petition on February 16, 2005 to list the polar bear under the Endangered Species Act. The petition was reviewed along with supporting information submitted with the petition and other information available to the FWS. A determination was made that the petitioned action may be warranted. The Service then conducted a status review of the species, and concluded that the petitioned action was warranted. The 12-month finding and a proposed rule were published in the *Federal Register* in January of 2007. An initial public comment period was open for 90 days. Additionally, the Service held three public hearings, 2 in Alaska and one in Washington, D.C., to receive information from the public. The comment period was re-opened for 30 days following the Service's receipt of nine USGS reports in September 2007; the nine USGS reports contributed to the Service's determination that the polar bear was a threatened species under the ESA.

The comment period totaled 120-days (twice the normal length), and closed on October 22, 2007. The Service based its final recommendation on a thorough review and assessment of historical information, new scientific studies including the Intergovernmental Panel on Climate Change (IPCC) AR4 report, other scientific literature, written public comments, transcripts of three public hearings, peer review, and the USGS reports, to reach its final recommendation.

How will protecting the polar bear under the ESA help conserve populations?

Once a species is added to the Federal list of threatened and endangered species, the ESA directs the Service to develop and implement a recovery plan. The recovery planning process provides an opportunity to bring stakeholders and polar bear experts together to identify specific actions and information needed to improve polar bear populations. Such a planning process will involve Arctic residents that directly interact with polar bears as well as species biologists. This expert input will greatly assist the Service in developing and implementing future management strategies.

The Service began working on a Conservation Action Plan for Polar Bears (Plan) in 2007. The Plan focuses on polar bear management and coordination among stakeholders, range-wide polar bear conservation planning, and research and monitoring. These actions, begun under the authority of the Marine Mammal Protection Act (MMPA) and other laws, will continue and expand with this listing. Full implementation of the Conservation Action Plan will address polar bear conservation in the near and long term, utilizing a broad, landscape-level approach. This Plan will utilize and depend upon the expertise, authorities, and support of our State, Federal, Alaska Native, and non-governmental partners in Alaska. International collaboration will also be fundamental to the success of the Plan.

Will the Secretary designate critical habitat for polar bears, and if so, when will this happen?

Not at this time. The Endangered Species Act requires that, to the maximum extent prudent and determinable, the Secretary of Interior designate critical habitat at the time the species is listed. To designate critical habitat the Secretary would need to identify specific areas occupied by polar bears where physical or biological features are located that are essential to the bears' conservation and which may require special management practices.

Under the ESA regulations, critical habitat designation is not prudent when such designation would not be beneficial to the species. In addition, the regulations state that critical habitat is not determinable when there is inadequate information to analyze impacts or the biological needs of the species cannot be correlated to a designated area.

Unlike habitat for other species, the sea ice platform used by the bear comes and goes every year and is in a state of decline from year to year. There are currently no steps that can be taken to halt the decline in sea ice. Even collective, international action to moderate climate change will take 50-75 years to alter the current trends in sea ice decline.

The inability to identify unique areas of benefit to the species, undertake special management practices, assess the economic and other relevant impacts of designation, and to prevent further decline in sea ice habitat resulted in the Department's conclusion that critical habitat cannot be determined at this time.

Polar Bear Subsistence and Hunting Concerns

Is it legal to hunt polar bears today?

In the United States, only the subsistence hunting of polar bears by Alaska Natives has been allowed since 1972. Harvesting of polar bears is an important cultural and economic activity for Native peoples throughout much of the Arctic. A management agreement is in place between the Inupiat of Alaska and the Inuvialuit of Canada and serves to help ensure that Beaufort Sea polar bear harvests remain at sustainable levels. The reported average combined harvest under this agreement is less than 65 bears each year. The FWS will continue to work with the Alaska

Native community to co-manage subsistence-related issues.

Polar bear hunting is prohibited in Norway and Russia. The harvest in Greenland is managed through a system that allows only full-time hunters living a subsistence lifestyle to hunt polar bears. In Canada, polar bears are harvested for subsistence purposes by the Inuit and Cree. Native hunters in the Northwest Territories and Nunavut Territory may use their harvest quota to guide sport hunts. The Canadian system has resulted in controls on the number of bears harvested as well as more accurate reporting of harvest activities.

Can sport-hunted polar bear trophies be brought into the United States now that the polar bear is listed?

No. Listing the polar bear as a threatened species under the Endangered Species Act automatically designates the polar bear as a depleted species under the MMPA. As a result, importation of sport hunted polar bear trophies was prohibited by the MMPA when the listing rule became effective on May 15, 2008.

If polar bear numbers are in decline, why is hunting allowed at all?

Harvesting polar bears is of social, cultural, and economic importance to Native peoples throughout much of the Arctic. In the US, Alaska Natives conduct subsistence polar bear harvest, consistent with the current provisions of the MMPA and the ESA. The FWS monitors such harvest. As noted in the final listing rule, subsistence hunting does not currently threaten the species in any significant portion of its range.

Why do some Native groups believe that local polar bear populations are actually increasing?

Native Arctic groups rely heavily on traditional ecological knowledge. For example, in Baffin Bay, Davis Strait, Western Hudson Bay, and other areas of Canada, Native hunters have reported increasing numbers of bears present on land and some of these hunters believe this indicates an increased population. In Western Hudson Bay, however—which contains an extensively studied bear population with a long record of capture data—analysis indicates that the population is in fact declining and that the increased observations of bears on land are a result of changing distribution patterns in this declining population. A recent study indicates that this population has declined from 1,194 bears in 1987 to 935 in 2004.

Loss of Sea Ice

Is there reliable evidence of changes in the Arctic ice cap over the last several decades?

Yes. Observational data, collected since the 1950s points to a decline in both the area covered by Arctic sea ice, as well as the thickness of Arctic sea ice. It appears to be declining at an increasing rate over the past decade.

How did polar bears survive previous warming events?

During prehistoric and historic periods, there is evidence suggesting that regional air temperatures were higher than present day and that sea ice and glacial ice were significantly reduced. There are differences, however, between the circumstances surrounding those conditions and the conditions bears face today. It is also believed that the current rate of climate change creates a unique challenge for present-day polar bears in comparison to historical warming events. The current rate of climate change appears to be more rapid and is occurring more uniformly across regions over a similar time frame, in comparison to previous warming events, which evidence suggests occurred in different regions at different times. While bears may have been able to adjust their ranges during previous warming events, they are likely to be much less able to do so under current climate model projections.

Climate Change

Is the Endangered Species Act an effective tool to regulate climate change?

No. The ESA was not designed by Congress as a means to provide general regulation of broad-based activities. Rather, the ESA was designed to evaluate specific actions and to identify specific threats to individual members of a species in a specific location, where the government could take targeted action to remove or moderate the threat and therefore avoid or curtail the impacts. Section 7 of the ESA requires federal agencies to consult with the USFWS when they are planning an action that may affect a listed species. For Section 7 of the ESA to come into play, there must be a clear nexus demonstrating the impacts from the proposed Federal agency action under review, on individual members of a listed species or their critical habitat (once such habitat is designated).

Because there are numerous sources which contribute to climate change and the actual impacts of climate change are not uniform across the globe, it is not possible to trace an impact from the source of greenhouse gases (GHGs), through the dynamics of the atmosphere and global climate change to ultimate impacts on individual members of a listed species or its designated critical habitat in a specific part of the world using currently available scientific analyses.

Federal action agencies are only required to consult on actions where it is shown that the species:

- is present in the area affected by the proposed Federal action and
- may be affected by that action.

To reach those conclusions the action agencies and the Service must apply the appropriate regulatory causation definitions. Without that causal connection to a level of reasonable certainty, the ESA does not come into play to address emissions from authorized projects or actions.

Even if the FWS determines that a proposed Federal activity is likely to cause jeopardy to the continued existence of a species, the ESA requires the Service to recommend reasonable and prudent alternatives that they believe will avoid jeopardy to the species and allow the activity to go forward.

If the main threat to polar bears is climate change and loss of sea ice, how can listing improve efforts to conserve polar bears?

While the Endangered Species Act is not the appropriate law to address greenhouse gas emissions or set climate change policy, the Fish and Wildlife Service is required by the Act to list species under the Act if certain criteria are met. The threat posed to the polar bear and its habitat by climate change requires the Service to designate it as a threatened species. Listing does not have any direct impact on the loss of sea ice or the reduction of greenhouse gases. Indirectly, listing may: enhance national and international cooperation and coordination of conservation efforts; enhance research programs to evaluate specific cause/effect relationships; and encourage the development of mitigation measures that will all help slow population declines. In addition, the Service will develop a recovery plan that will guide efforts intended to ensure the polar bear's long-term survival and eventual recovery.

How reliable are the predictions of sea ice habitat loss over the next 50 years?

The Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (IPCC AR4), which was released in 2007, is the result of independent scientific review from over 20 current-generation climate models. The spatial resolution and physics of the climate models have significantly improved our understanding of ocean conditions, mobile sea ice, clouds/radiation, and land/atmosphere exchanges. Uncertainties have been reduced significantly when compared to previous-generation models (i.e., those used in the IPCC Third Assessment Report (TAR)). Generally accepted climate models consistently project sea ice loss in the next 50 years. After 50 years, model projections diverge and uncertainty increases.

Can the decline in polar bear populations be reversed?

Because of the magnitude of the current GHG inventory in the atmosphere, the natural mechanisms which influence it, and the period of time required to reduce GHG accumulations, there is a long lag time associated with GHG emission controls and their effect on climate. It may take decades to slow the changes in temperature now being experienced in the Arctic. As a result, studies project that declining sea ice habitat will result in the loss of approximately two thirds of the world's current polar bear population by the mid 21st century. Although the inertia in the climate system means that reductions in GHG emissions today will not have an immediate effect on global temperature or sea ice decline in the next 50 - 75 years, independent actions taken in the next few years to control GHGs may begin to show some effect thereafter. International efforts to reduce contributions of GHGs in the long run could prove to be beneficial.

If many polar bear populations will disappear in the next 50 years regardless of what we do, how can we justify spending money on a species that is in decline?

Polar bear experts forecast that the bears will survive in the Archipelago Ecoregion (the islands and channels of the Canadian Arctic characterized by heavy annual and multi-year ice) through the end of the century; therefore, action starting now could reverse the current trend in time to

prevent polar bears from disappearing altogether. The Endangered Species Act requires the Fish and Wildlife Service and other federal agencies to do what they can to prevent the extinction of listed species. Working with other nations in the polar bear's range, as well as the State of Alaska and other federal agencies, scientists and academic institutions, the Service will develop a recovery plan that focuses on a viable polar bear population that could be used to reestablish polar bear populations if and when habitat conditions improve. The Service believes it is justified to spend money and resources on polar bear conservation efforts to ensure its long-term survival as a species.

Current Polar Bear Protections

Are polar bears currently recognized as being an at-risk species by other nations?

Polar bears are listed as species of concern in both Canada and Russia. The principal international protection for polar bears, however, comes from the international Agreement on the Conservation of Polar Bears (Polar Bear Treaty) that was signed in 1973 by the five nations with polar bear populations: Canada, Denmark (for Greenland), Norway, the U.S., and the former U.S.S.R. (now accepted by Russia). The focus of that treaty is to reduce the taking of polar bears.

Under the Polar Bear Treaty, these countries agreed to regulate hunting of polar bears and to prohibit the practice of hunting polar bears from aircraft and ships. The treaty agreed to protect polar bear denning areas and migration patterns. The range countries also initiated research concerning polar bear conservation and management. Since the treaty was signed, the countries have shared polar bear research with each other. The provisions of the Polar Bear Treaty are carried out under US law through the MMPA.

In addition to the Polar Bear Treaty, the bears have been given international protection under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), also signed in 1973. That treaty is focused on reducing the threat created by the international trade in certain species.

Also, the United States and Russia signed a bilateral polar bear conservation agreement for the shared Bering/Chukchi Sea polar bear population on October 16, 2000. The purpose of the Agreement is to assure long-term, science-based conservation of the polar bear population.

What is currently being done to protect polar bears in Alaska?

The Department of the Interior has an active polar bear management and research program in place. The management program includes cooperation and collaboration with a broad array of partners. The FWS is working with Alaska Native groups to provide technical support for an Inupiat/Inuvialuit agreement between indigenous hunters of Alaska and Canada. The Service is participating in the U.S.-Russia Bilateral Agreement to develop population estimates and manage subsistence harvest of this shared population. The Department continues to manage oil and gas operations to minimize impacts on resident wildlife, including polar bears. Implementation of

the ESA and use of the Incidental Take Regulations established under the MMPA are important tools.

The Department's research program includes studying polar bear population status and trends, conducting a variety of ecological investigations including studies on the distribution and feeding ecology of on-shore bears, denning emergence patterns, and habitat relationships in the Southern Beaufort and Chukchi Seas. The Department and its collaborators conduct studies of polar bear behavior and distribution in areas of development and the presence of disease and contaminants in polar bears. Finally, the FWS is taking steps to minimize bear-human interactions and their potential adverse effects. More on these programs can be found at <http://alaska.fws.gov/fisheries/mmm/polarbear/pbmain.htm> and http://alaska.usgs.gov/science/biology/polar_bears/.

What other conservation strategies are being used to benefit polar bears?

The Secretary of the Interior recently signed a Memorandum of Understanding with the Canadian Minister of the Environment for cooperation on polar bear management. The Service will continue to seek out all potential strategies to effectively conserve polar bears. The Department will continue to work with the State of Alaska and other interested parties in collaborating to this end.

Special Rule under section 4(d) of the Endangered Species Act

What is the special rule associated with the polar bear listing decision?

In conjunction with the listing decision, the Department published an interim special rule under section 4(d) of the ESA. A comment period on this interim rule concluded on July 14, 2008. The rule aligns the conservation measures in the ESA with the MMPA and CITES. The rule adopts the existing conservation requirements under the MMPA as appropriate, and acknowledges that all protections afforded under CITES will continue to apply to polar bears. Under the rule, the benefits of the ESA are maintained while streamlining its application by determining that any activity, either authorized or exempted under the MMPA or CITES, would also be authorized under the ESA, without additional paperwork. This is because the MMPA and CITES already protect polar bears and allow for mitigation measures that may contribute to the bears' conservation needs. If an activity is not authorized or exempted under the MMPA and CITES and the proposed action may result in an action that would otherwise be prohibited under the ESA or its implementing regulations, the activity can only proceed after an appropriate ESA permit is issued.

How will the special rule affect existing activities?

The interim special rule does not affect the continued subsistence harvest or the production and sale of polar bear handicrafts by Alaska Natives. Those activities are already exempted under the ESA and the MMPA. The 4(d) rule will allow the continued noncommercial export of Native

handicrafts made from polar bear parts that would otherwise be prohibited as a result of the polar bear listing under the ESA.

Onshore and offshore oil and gas exploration, development, and production activities in Alaska have been effectively governed for decades by the more stringent MMPA provisions. Under the 4(d) rule, the Department of the Interior will continue to rely on those more stringent provisions to control that activity.

Section 7 of the ESA requires federal agencies to ensure that the activities they authorize, fund or carry out are not likely to jeopardize the continued existence of the species or to destroy or adversely modify its critical habitat. If a federal action may affect a listed species or its critical habitat, the permitting or action agency must enter into consultation with the Service. This requirement remains unchanged with the special rule.

Based on the extensive analysis associated with the polar bear listing rule and the 4(d) rule, it has been determined that activities and federal actions outside Alaska do not currently show a causal connection impacting individual polar bears and therefore no consultation is warranted at this time.

Are there additional steps in the listing process?

The listing decision was effective immediately upon publication of the final listing rule in the *Federal Register* on May 15, 2008. An additional interim special rule was also published on the same day as the polar bear listing to harmonize the application of the ESA with the MMPA and CITES. Polar bears have been covered by the MMPA since 1972.

Oil and Gas Exploration and Development

Do polar bears occur or travel through areas currently under exploration or development for oil and gas?

Yes. Polar bears are found along the Beaufort and Chukchi Sea coasts and use the sea ice and lands within the existing oilfields and coastal areas where exploration for oil and gas occurs. The Service works with industry to develop and implement appropriate safety measures for both workers and polar bears. Mitigation measures and polar bear encounters are tracked and evaluated through the Service's Incidental Take Program, established under the MMPA.

What impact will the lease sale in the Chukchi Sea have on polar bears?

At this time, the FWS has determined that the open-water seismic testing taking place pursuant to the lease sale will not likely jeopardize polar bears. Lease sale activities will require project-by-project consultation under the ESA, as well as compliance with other environmental laws.

Will ongoing oil and gas development threaten the future existence of polar bears?

An analysis of the future oil and gas development activities, as well as various other factors that might impact polar bears throughout their range, was conducted. This review led to the determination that these activities do not pose a threat to polar bears. The factors considered included: (1) mitigation measures in place and likely used in the future; (2) historical information on development activities; (3) the lack of direct, quantifiable effects to habitat from these activities noted to date; (4) the availability of alternate habitat; and (5) because of the localized nature of development activities or possible events such as oil spills.

The Service determined that ongoing oil and gas activities do not pose a threat to the species' survival and that any anticipated take of polar bears under the MMPA (all of which is anticipated to be non-lethal take) will continue to have a negligible impact.