

CONSERVATION AND MANAGEMENT OF POLAR BEAR POPULATIONS IN RUSSIA



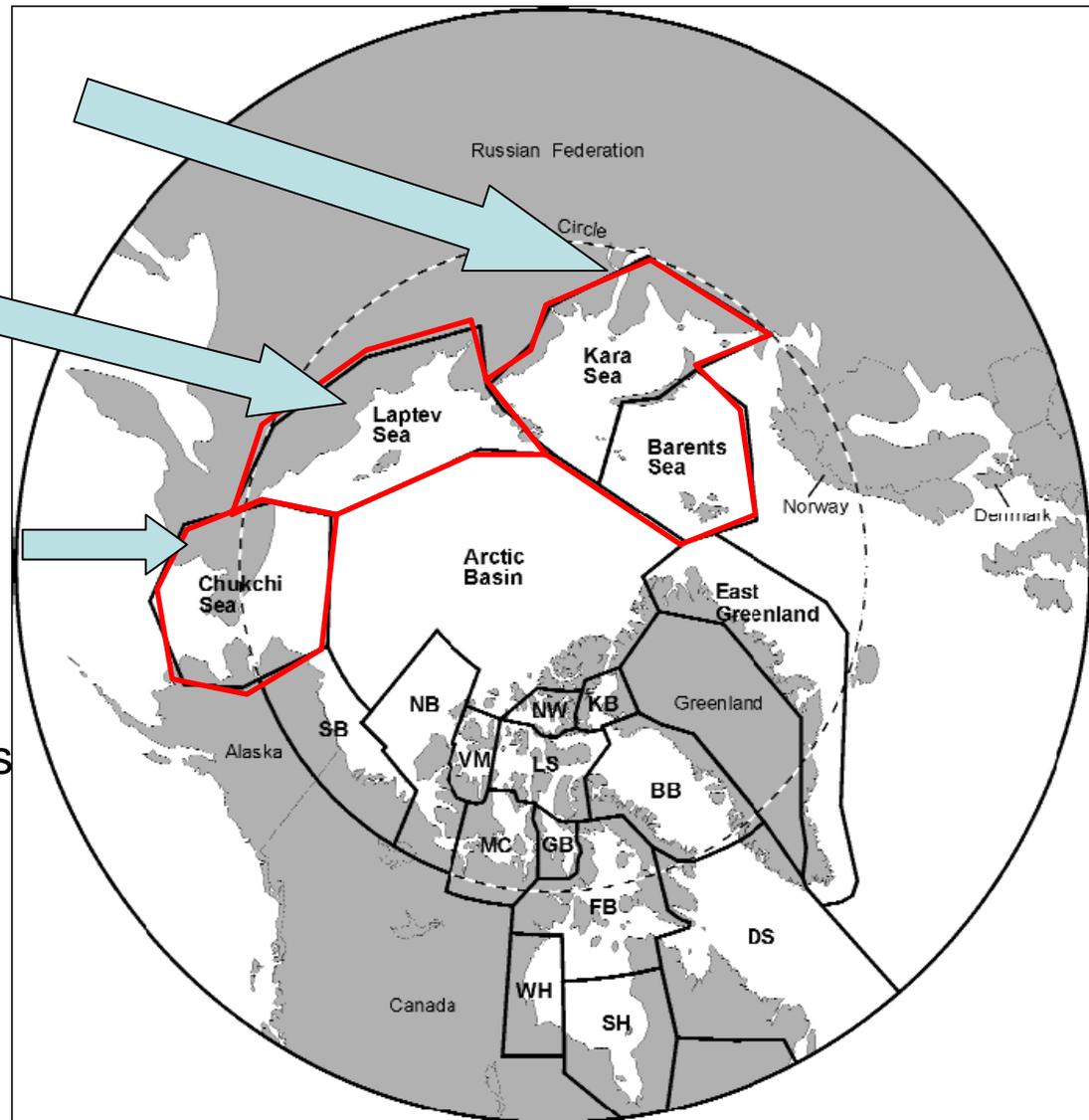
1973 Agreement on Polar Bear Conservation

The signing of the Agreement on polar bear conservation in 1973 was a significant event in Arctic nature conservation. For the first time, its Parties declared their intent to:

- undertake national measures on the conservation and recovery of polar bear populations;
- protect ecosystems of which polar bears are a part;
- coordinate research and management of shared populations;
- conduct national research programs, especially studies of habitat conservation.

Status of polar bear populations and abundance in the Russian Red Data Book

- Kara-Barents Sea (Barents Sea and Kara Sea) – IV Category (*undetermined status*), 2,500-5,000 individuals
- Laptev (Laptev Sea, western part of the East Siberian Sea) – III Category (*rare population*), 800-1,200 individuals
- Alaska-Chukotka (eastern part of the East Siberian Sea, Chukchi Sea and northern part of the Bering Sea) - V Category (*recovering population*), 2000-5000 individuals (as per estimates of IUNC PBSG specialists (2005) – 2,000 individuals)



Geographical variability of polar bears inhabiting the Russian Arctic

Findings from studies conducted in the late 20th and early 21st Centuries show that several polar bear subpopulations exist within the Kara-Barents Seas population range. It cannot be ruled out that the Laptev and Alaska-Chukotka populations also have a more complex population structure.

Threats to polar bears

Currently the most significant threats to polar bear include:

Climate warming in the Arctic;

Environmental contamination and pollution.

Changes of critical parameters of polar bear vital activities affected by climate warming

- Changes in range, distribution, migration patterns and preferred habitats of polar bears and ice seal species, which are their primary prey;
- Decrease in availability of prey species;
- Increased mobility and, accordingly, energy expenditure of polar bears;
- Growing risk of destruction of maternity dens during abnormally warm winters.

Consequences of climate warming for polar bears:

- Deteriorated physical state of the animal;
- Lower survivability of bear cubs and adults;
- Drop-off in population numbers;
- Increased number of conflicts with humans.

Another threat to polar bears: habitat pollution and contamination

Major ways in which pollutants and contaminants enter Arctic seas:

- The source of most pollutants and contaminants lies outside the Arctic and is carried to higher latitudes by sea currents and air masses;
- Some of the pollutants and contaminants are formed within the region itself as a result of mining activities, non-ferrous industries and the fuel-and-energy complex located in the region. They are carried to marine ecosystems by air or with river flows.

Stable organic compounds in polar bear tissues and organs

- High concentrations of PCBs and pesticides have been identified in polar bears in the area of Spitsbergen, Franz Josef Land, and the northern part of the Barents and Kara Seas;
- Stable organic compounds adversely affect polar bear immune and endocrine systems, and, it is likely, the condition of the population.

Other organic compounds with toxic effects have been identified in Arctic, including:

- Furans;
- Naphthalines;
- Dioxins;
- Bromide antipyrins;
- Fluorine-containing organic compounds (for example, perphoctan sulphonate has been found in polar bears in North America and Spitsbergen)

The action of these compounds on the polar bear's body is not known, but it cannot be ruled out that they are hazardous; likewise PCBs and pesticides.

Climate warming creates favorable conditions for increased marine traffic in the North

- Year-round navigation and use of a large number of vessels, various types of transportation vehicles and cargo are anticipated. Oil will occupy a major place among them.
- While transporting oil by tankers, one cannot rule out accidental oil spills and damage to marine ecosystems and the communities and species of living organisms which inhabit them, including polar bears.

Legislative framework for polar bear protection within Russia

Federal laws:

- On environmental protection (2001)
- On wildlife (1995, with subsequent amendments)
- On especially protected areas (1995, with subsequent amendments)
- On the exclusive economic zone of the Russian Federation (1998)

Polar Bears in Russia's Red Book

The Red Data Book of the Russian Federation is an official document reflecting government policies on conservation and recovery of rare and endangered species within Russia

Taking of wildlife listed in the Russian Red Data Book is allowed in the following specific cases:

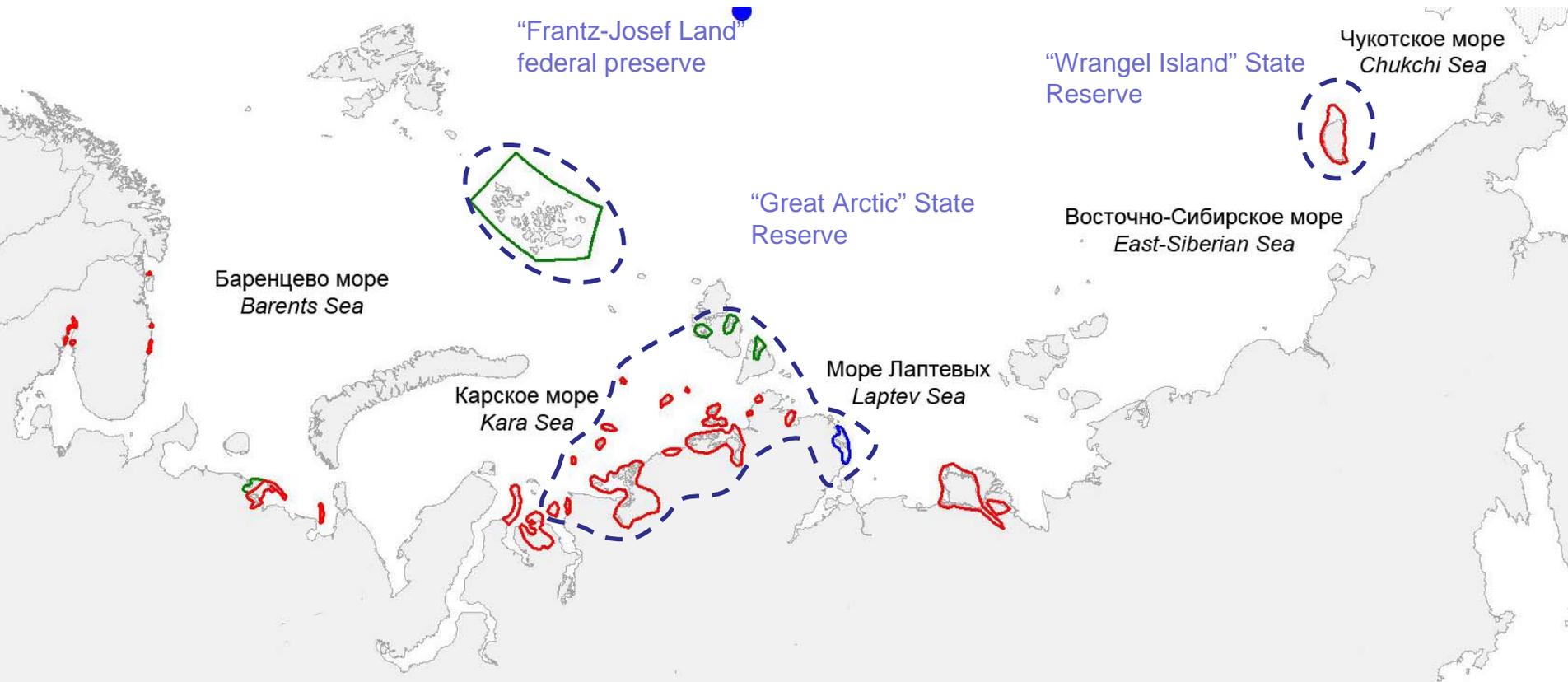
- For conservation of these animals;
- For regulating their numbers;
- For protection of a population's health;
- For averting threat to human life;
- For prevention of mass diseases of farm livestock and other domestic animals;
- For subsistence needs of indigenous and minority peoples and for other purposes.

Polar Bears in Russia's Red Book (continued)

- Development of government policies in the conservation and restoration of wildlife species, listed in the Red Data Book of the Russian Federation, comes under the authority of the Ministry of Natural Resources of the Russian Federation;
- Control and monitoring of these species is under the jurisdiction of administrative entities of the Russian Federation.

Conservation of polar bear habitat

After the Agreement was signed in 1973, specially protected nature areas were established in critical polar bear reproduction and feeding areas. The most important ones are “Wrangel Island” and “Great Arctic” State Nature Reserves and the Franz-Josef Land Federal Refuge.



Russian-Norwegian polar bear cooperation

Cooperation between Russia and Norway on polar bear studies has been carried out since 1997, when the first joint polar bear field expedition was organized in the Barents Sea.

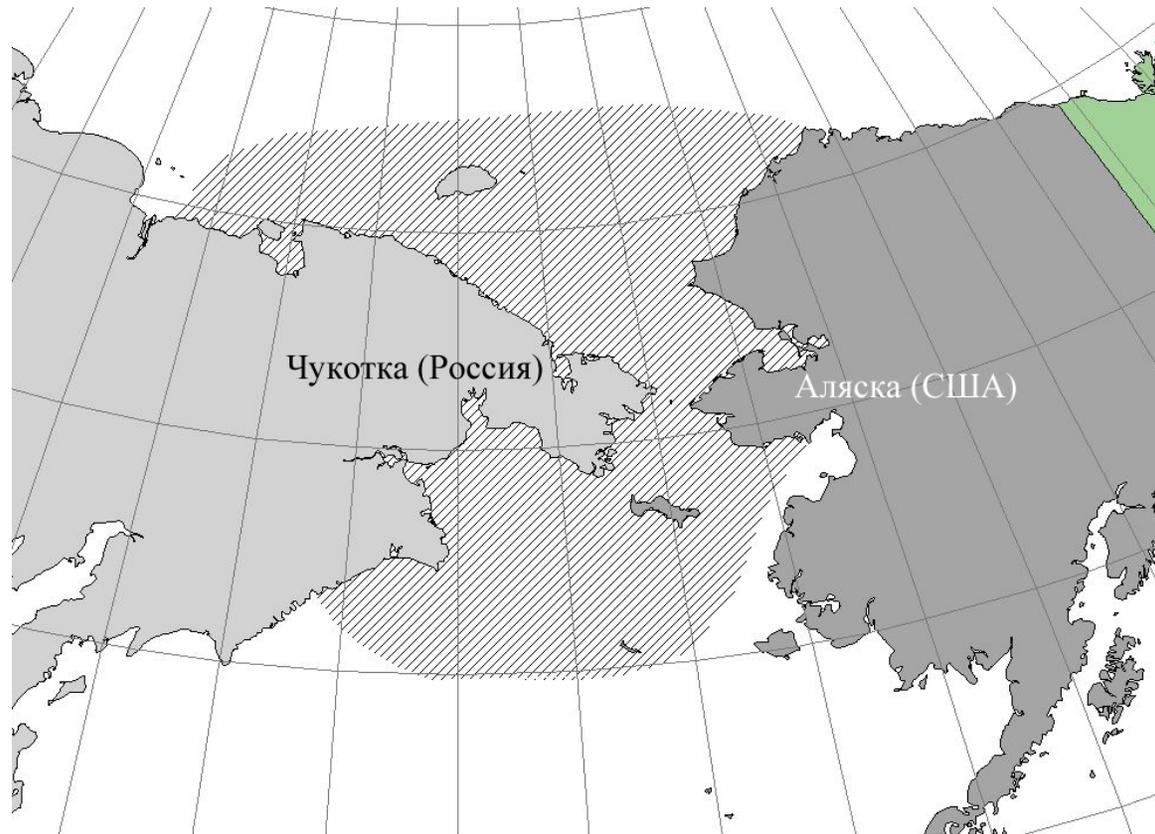
Polar bear census and estimates in the northern Barents Sea

- In 2004 an aerial polar bear survey with participation of specialists from Norway, Russia and several international organizations was carried out in the northern Barents Sea, including the archipelagoes of Spitzbergen and Franz-Josef Land;
- Surveys were conducted on the Norwegian vessel “LansØ” with a helicopter onboard;
- The number of polar bears within the survey area is estimated at 3,000 individuals.



Russian-U.S. polar bear cooperation

Russian-U.S. collaboration on polar bears was launched in 1989. The most important result of this joint work was the drafting and signing of the *Agreement between the Government of the United States and the Government of the Russian Federation on the Conservation and Management of the Alaska-Chukotka Polar Bear Population* on 16 October, 2000 in Washington, DC. The Agreement is expected to enter into force in the near future.



Subsequent Actions under the 1973 Russia-U.S. Polar Bear Agreement

According to Article 2, the parties to the Agreement will collaborate to protect the Chukotka-Alaska polar bear population, its habitat and use for traditional subsistence of the native population. In this connection the parties will focus particularly on denning areas and areas where polar bears concentrate during feeding and migration.

Under the Russian-U.S. Polar Bear Agreement:

- hunting of polar bears will be permitted only by hunters from native peoples living in coastal villages of Chukotka and Alaska
- hunters will have the right to make, sell and use traditional handicrafts connected with subsistence harvest of polar bears
- none of the provisions of the Agreement gives the right to take polar bears for commercial purposes

Under the Russian-US Polar Bear Agreement:

- it is prohibited to take females with cubs younger than one year, bears in dens or entering or leaving dens, and to use any large motorized vehicles while hunting polar bears;
- federal and regional authorities have the right to undertake other measures to strengthen enforcement of protection of polar bears and their habitat

Protection and Monitoring of the Chukotka-Alaska Polar Bear Population involving the Native Population

Currently in Chukotka at the initiative of the native population of coastal villages and with the support of WWF and the government of the Chukotka Autonomous Region, “bear patrols” consisting of very experienced hunters have begun to operate. Their tasks include prevention of conflicts between polar bears and humans as well as making regular observations (monitoring) of polar bears.

Priority Areas for Scientific Research

- Study of the status of polar bear populations and their main food sources;
- Study of the effect of climate change and environmental pollution on polar bears and their habitat;
- Research on relationships with food sources and humans;
- Applied scientific projects aimed at developing and introducing ways and means to reduce conflicts between animals and humans.

Strategy for Polar Bear Protection in the Russian Arctic

- In order to more effectively protect polar bears, WWF-Russia initiated the drafting of a Strategy for Polar Bear Protection in Russia. This initiative was supported by the Ministry of Natural Resources of the Russian Federation.
- The draft Strategy will be discussed at meetings involving representatives of interested agencies, scientific institutes, NGOs and associations of native peoples.