Despite rising concern over its population status, the ivory gull remains one of the least-known seabird species in the world. Observed climate changes in the Arctic along with a potential build up of toxic chemicals in the birds suggest that the species may be in trouble. Populations have probably been declining in several parts of its range for a long time, but global data to support this has been lacking.

Recent studies in the Canadian Arctic found a dramatic decline in ivory gull breeding populations. This led delegates at a BirdLife International forum to discuss the need to re-evaluate the species’ conservation status in the World Conservation Union’s (IUCN) Red List of Threatened Species. However, lack of data from Russia, Norway (Svalbard), and Denmark (Greenland) — where ivory gulls also breed — has made it difficult to scientifically ground such a reassessment. The only surveys of ivory gull numbers ever conducted in Russia, for example, where almost two-thirds of the global breeding population is believed to be located, took place in the 1990s.

To fill in some of the knowledge gaps, the Russian Arctic and Antarctic Research Institute surveyed ivory gull nesting grounds in Russia, as part of a wider survey of such grounds in the Norwegian and Russian Arctic. The surveys formed part of Russian-Norwegian environmental cooperation in the Barents Sea region in summer 2006.

In Russia, ivory gulls are known to breed in around 50 colonies on high-latitude islands and archipelagos stretching from the north-western Barents Sea to the eastern Kara Sea. The survey team planned to check the most important of these colonies in three different areas: Severnaya Zemlya Archipelago, Franz Josef Land Archipelago, and Victoria Island.

This ambitious plan to survey a vast and remote area in the short arctic breeding season and under difficult conditions required close cooperation with the Russian Arctic Border Guard network, which provided two of their helicopters.
to conduct the aerial surveys.

The team flew 4,850 kilometres during the 13-day survey. Dense fog and poor visibility seriously affected planned aerial surveys, but the team nevertheless managed to visit the principal sites in all three areas.

The first stop was Domashny Island — a tiny isle within the Sedov Archipelago (part of Severnaya Zemlya Archipelago) where ivory gulls have been recorded as breeding since the 1930s. A direct total count of incubating birds provided the highest-ever recorded figure of 1,890 breeding pairs (in the 1990s, the population fluctuated between 166 and 1,100 pairs).

Another four occupied colonies were found on the islands of Franz-Josef Land, with between 3 and 450 breeding pairs each.

Victoria Island, the westernmost point of the survey, was reported as an important breeding area for ivory gulls in the 1960s, with the largest colony of 750 pairs observed in the mid-1990s (see Arctic Bulletin 03.95). No breeding ivory gulls were observed in 2006, however to the survey team mapped almost 900 old nest bases and holes.

Altogether, the team obtained information for seven breeding colonies with almost 3,000 breeding pairs, including two colonies reported by personnel of weather stations.

The survey confirmed estimates made in the mid-1990s that as many as 10,000 pairs, out of 14,000 worldwide, breed in Russia in good years. It also indicated that in Russia, there is no clear trend in overall population number, but that the number of breeding pairs fluctuates from year to year depending on environmental conditions.

The most obvious environmental difference between the three survey areas was ice conditions: there was no sea ice around Victoria Island, relatively light ice cover in the Franz-Josef Land area, and a vast area of pack ice in the eastern Kara Sea around Domashny Island.

This difference is believed to explain the observed distribution of breeding ivory gulls. Good sea ice cover probably provided better foraging conditions for the gulls, which feed on sympagic (species that live permanently under polar sea ice) fish and crustaceans. Most of the birds were breeding in close proximity to human settlements and managed to survive human impacts and stray dogs.

Overall, the 2006 ivory gull breeding season was favourable, especially in the eastern Kara Sea where a very high breeding density and large clutch sizes were observed. The team reported the highest-ever percentage of three-egg clutches, earlier hatching dates, and a greater body mass both in breeding adults and chicks at hatching.

The northeast Barents Sea and eastern Kara Sea remain the main breeding area for the ivory gull at the global level — and the importance of this region is growing given the recent ice cover retreat in other breeding grounds such as the Atlantic sector of the Arctic.

However, the gulls’ tendency to aggregate in large numbers for breeding — as evidenced by the record number of pairs on Domashny Island, which accounted for around 20 percent of the estimated Russian population — also indicates that the species is highly vulnerable to various threats that may impact on the population level.

Ongoing monitoring and research of the ivory gull in this key area is crucially important in order to develop a conservation strategy with a circumpolar perspective. This work is ongoing within the Arctic Council's Conservation for Fauna and Flora seabird expert group.

The impact of climate change on whales, dolphins, and porpoises is growing. And with climate change impacts currently being greatest in polar regions, the Arctic’s cetaceans are particularly vulnerable.

According to a report released by WWF and the Whale and Dolphin Conservation Society (WDCS), Joanna Benn reports.

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Sea ice at record low  p. 4–5
New rules needed for Arctic  p. 7
The impact of climate change on arctic politics and biology  p. 21–22
SPECIAL INSERT: Kamchatka and Bering Sea Ecoregions  p. 11–14