

High Arctic species on thin ice

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A new assessment of the Arctic's biodiversity reports a 26 per cent decline in species populations in the high Arctic.

Populations of lemmings, caribou and red knot are some of the species that have experienced declines over the past 34 years, according to the first report from The [Arctic](#) Species Trend Index (ASTI), which provides crucial information on how the Arctic's ecosystems and wildlife are responding to environmental change.

While some of these declines may be part of a natural cycle, there is concern that pressures such as [climate change](#) may be exacerbating natural cyclic declines.

In contrast, population levels of species living in the sub-Arctic and low Arctic are relatively stable and in some cases, increasing. Populations of marine mammals, including bowhead whales found in the low Arctic, may have benefited from the recent tightening of hunting laws. Some [fish species](#) have also experienced population increases in response to rising sea temperatures.

"Rapid changes to the Arctic's ecosystems will have consequences for the Arctic that will be felt globally. The Arctic is host to abundant and diverse wildlife populations, many of which migrate annually from all regions of the globe. This region acts as a critical component in the Earth's physical, chemical, and biological regulatory system," says lead-author Louise McRae from the Zoological Society of London (ZSL).

Data collected on migratory Arctic [shorebirds](#) show that their numbers have also decreased. Further research is now needed to determine whether this is the result of changes in the Arctic or at other stopover sites on their migration.

Louise McRae adds: "Migratory Arctic species such as brent goose, dunlin and turnstone are regular visitors to the UK's shores. We need to sit up and take notice of what's happening in other parts of the world if we want to continue to experience a diversity of wildlife on our own doorstep."

The ASTI includes almost 1,000 datasets on Arctic species population trends, including representation from 35 per cent of all known vertebrate species found in the Arctic.

Co-author Christoph Zöckler from the UNEP-World Conservation Monitoring Centre says: "The establishment of these results comes at a crucial time for finding accurate indicators to monitor global biodiversity as governments strive to meet their targets of reducing biodiversity loss."

The findings of the first ASTI report will be presented at the 'State of the Arctic' Conference in Miami, USA. The full report will be available to download from www.asti.is.

Provided by Zoological Society of London

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