

## Background information: the Arctic Species Trend Index (ASTI)

### What is the ASTI?

The Arctic Species Trend Index (ASTI) is a scientific measure used to track how Arctic ecosystems and vertebrate species are responding to change. Scientists can organize the data to describe overall trends across species, taxonomy, ecosystems, regions and other categories, and explore how these trends are related to other changes in Arctic ecosystems. Over time, the ASTI will help reveal patterns in Arctic wildlife response to human-induced and natural pressures, thereby facilitating better decisions around conservation, sustainability and protection of Arctic ecosystems: [www.asti.is](http://www.asti.is)

### What's new in 2012?

The ASTI data set has recently been updated from its original 2010 release. It now incorporates population-abundance data for 890 populations of 323 species of fish, birds and mammals from 1970 to 2007. This data represents 37% of all known Arctic vertebrate species, a large number for such an index.

- Recent analysis includes a closer look at the marine data sets and an exploration of spatial biodiversity data analysis techniques. Both are summarized in a key findings report.

### Why is the ASTI important?

The ASTI is an important tool to inform policy and develop effective conservation and adaptation strategies in the Arctic, an environment undergoing dramatic changes. It can also be used to examine historical and current Arctic biodiversity monitoring efforts in order to inform strategic decisions on priority areas and species to monitor.

The ASTI is also the Arctic component of a global index of vertebrate species trends, the Living Planet Index (LPI). Both the LPI and the ASTI, because they combine information on trends in many species into one measure that can be plotted over time, are useful for visualizing change and tracking overall progress towards biodiversity targets, such as those set through the Convention on Biological Diversity.

### Who is behind the ASTI?

The ASTI was commissioned and coordinated by the Circumpolar Biodiversity Monitoring Program (CBMP), the cornerstone program of the Conservation of Arctic Flora and Fauna (CAFF) the biodiversity Working Group of the Arctic Council. The most recent ASTI analyses were a collaborative effort between the CBMP, the Zoological Society of London, and the World Wildlife Fund.

### **The Circumpolar Biodiversity Monitoring Program (CBMP)**

The Circumpolar Biodiversity Monitoring Program (CBMP) is an international network of scientists, governments, Indigenous organizations and conservation groups working together to harmonize and integrate efforts to monitor and report on important trends in the Arctic's living resources. The CBMP aims to facilitate more rapid detection, communication, and response to the significant biodiversity-related trends and pressures affecting the circumpolar world. **Contact:** Mike Gill, CBMP Chair (on site at IPY): [mike.gill@ec.gc.ca](mailto:mike.gill@ec.gc.ca), +1 867 334 -3258

### **The Conservation of Arctic Flora and Fauna (CAFF)**

CAFF is the biodiversity working group of the Arctic Council and consists of National Representatives assigned by each of the eight Arctic Council Member States, representatives of Indigenous Peoples' organizations that are Permanent Participants to the Council, and Arctic Council observer countries and organizations. CAFF's mandate is to address the conservation of Arctic biodiversity, and to communicate its findings to the governments and residents of the Arctic, helping to promote practices which ensure the sustainability of the Arctic's living resources. **Contact:** Tom Barry, Executive Secretary of CAFF (on site at IPY): [tom@caff.is](mailto:tom@caff.is), +354 861-9824

### **The Zoological Society of London (ZSL)**

Founded in 1826, the Zoological Society of London (ZSL) is an international scientific, conservation, and educational organization. Its mission is to achieve and promote the worldwide conservation of animals and their habitats. ZSL runs London Zoo and Whipsnade Wild Animal Park, carries out scientific research in the Institute of Zoology, and is actively involved in field conservation worldwide. ZSL is responsible for continuing the development and update of the Living Planet Index.

### **World Wildlife Fund (WWF)**

The World Wildlife Fund (WWF) is one of the world's largest and most respected independent conservation organizations, with over 5 million supporters and a global network active in over 100 countries. WWF's mission is to stop the degradation of the Earth's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption. [panda.org/news](http://panda.org/news) for latest news and media resources. WWF created the Living Planet Index.