



AN ARCTIC UPHELD

THE CENTRE FOR ARCTIC KNOWLEDGE
AND EXPLORATION



The Centre for Arctic Knowledge and Exploration at the Canadian Museum of Nature

Educating the public about the natural world, the Canadian Museum of Nature (CMN) is one of six national museums across Canada serving millions of visitors annually.

With a century-long history of Arctic involvement, much of the museum's research and collection activity is dedicated to the Arctic. The collection includes 300,000+ Arctic fishes, plants, birds, mammals, fossils, invertebrates, and other natural history specimens. The museum's collection and science expertise form the foundation of the permanent Arctic gallery space and programs.

Founded in 2014, the Centre for Arctic Knowledge and Exploration (CAKE) at the CMN is a global museum leader in Arctic knowledge and exploration, natural history collections storage, preservation and digitization, and nature inspiration.

The Centre is home to world-renowned researchers and collections specialists with expertise in biological and mineral diversity. Leading research programs and collaborating with international universities, museums, and independent research institutes, CAKE researchers generate new scientific knowledge and collect new specimens to add to the museum's collection each year. These specimens advance Arctic exploration, education, research, and discovery that is critical to our planet's future.

Our Organization— A History of Success

In 2013, CMN undertook an ambitious five-year plan to advance Arctic knowledge and understanding. CMN's Arctic initiative accomplished the following:



Established the Centre for Arctic Knowledge and Exploration



Recruited new scientists, post doctoral research fellows, and students, expanding the museum's capacity in Arctic science



Conducted diverse field work at Resolute Bay and Cambridge Bay research centres, remote work sites in national and territorial parks, and other Arctic locations, in both marine and terrestrial environments



Generated substantial new Arctic knowledge through publication of research results in peer-reviewed scientific journals



Digitized and made globally available Arctic collection data, enabling new discovery by scientists around the world



Launched a national education program, inspiring students to understand and respect Canada's North



Initiated creation of a global travelling exhibit to bring the story of the Canadian Arctic to museums across Canada and embassies around the world



Created the Canada Goose Arctic Gallery, providing a permanent space for Arctic education, discovery, and dialogue

All of this work, plus much more, was completed with a national vision of inspiring understanding and respect for nature for a better Canada.



Nature Beyond our Nation— A Global Challenge

Arctic changes are the most significant natural history events of our lifetime. They are not just Canadian challenges—they are global challenges. The Arctic is warming at twice the global rate. With this warming causing sea ice to melt, global weather patterns are being affected and Arctic biodiversity in marine and terrestrial environments is being impacted significantly.

Over 50% of the world's population lives in cities (in Canada it is over 80%), therefore understanding one's connection to nature is limited.

Addressing this disconnect is critical, especially for children and youth, since they are the next generations responsible for stewardship of this planet.




Fieldwork, Collections, and Storytelling— A Global Solution

To understand the rapid changes occurring in the Arctic and to create research programs that increase knowledge about our natural world, fieldwork in the Arctic is essential. Collection-based fieldwork builds a record of evidence over time and space, allowing researchers to describe the biological diversity of the Arctic. This is an important step in understanding how Arctic ecosystems function normally and during environmental changes. Studies of how sea ice collisions with the ocean floor impact marine animals and how climate warming changes plant distributions demonstrate why specimen collections are critical—without collections over time, it is impossible to determine what changes have occurred.

While it is impossible to know exactly how collections will be used in the future, we do know discoveries can't be made without documented historical data.

Specimens and freely-shared specimen records contribute to the stories that can be told to the public, policy makers, and scientists.

Considering how fast the Arctic is changing, it is critical to collect specimens each year. However, the collection of specimens is just the beginning of the scientific process. The specimens have to be carefully identified, preserved for future research, documented, then the information is shared in digital format. Sharing digital data from our collections allows broader questions about the impact of Arctic warming to be answered by the global research community. By telling the story behind these collections to the public today, the next generation of researchers and Arctic advocates will be inspired to save our planet tomorrow.

A red Canadian icebreaker ship, the Des Groseilliers, is shown from the side, sailing through a dense field of ice floes. The ship has a white superstructure and a red hull. On the hull, the text "Pêches et Océans Canada" and "Fisheries and Oceans Canada" is visible, along with the ship's name "DES GROSEILLIERS" and "OTTAWA". The background features a large, rugged mountain range under a cloudy sky.

"If you get your science right, you get your solutions right... if we understand the majesty and intricacies of all species, we can help protect them and preserve them for future generations. This is why it's so important for me to support places such as the Canadian Museum of Nature."

-ROSS BEATY, GEOLOGIST, ENTREPRENEUR, MUSEUM DONOR

Looking Ahead— Building A Collective Future

With the globally-recognized scientific expertise, we are positioned to become a global museum leader that generates new knowledge and engages in dialogue about the Arctic and its importance to our collective future. To do this, we will:

RAISE THE PROFILE of Canadian Arctic research

LEVERAGE new research networks through talent recruitment and succession to advance discovery and knowledge generation

ALIGN CAKE and co-create new content with established partners to enhance public engagement

CONTRIBUTE to knowledge creation and sharing on national and international research and education projects

SHARE Arctic content nationally and globally via exhibits, digital media, maps, school resources, and open access scientific literature

SPONSOR strategic Arctic conferences and events

GROW the Arctic national collection and increase the percentage of our collection that is shared digitally with the global scientific community following global standards, including adding images of bird skins, polar bear skulls, caribou antlers, and other animals to the current plant-only digital image collection



Upholding the Arctic—An Invitation to Join Us

With the help of our donor community, we are ready to transform people's understanding of Canada's leadership in Arctic knowledge and our collection's importance to nature's future. We would be pleased to discuss how you can join us in enabling Arctic research and discovery.

LAURA EVANS

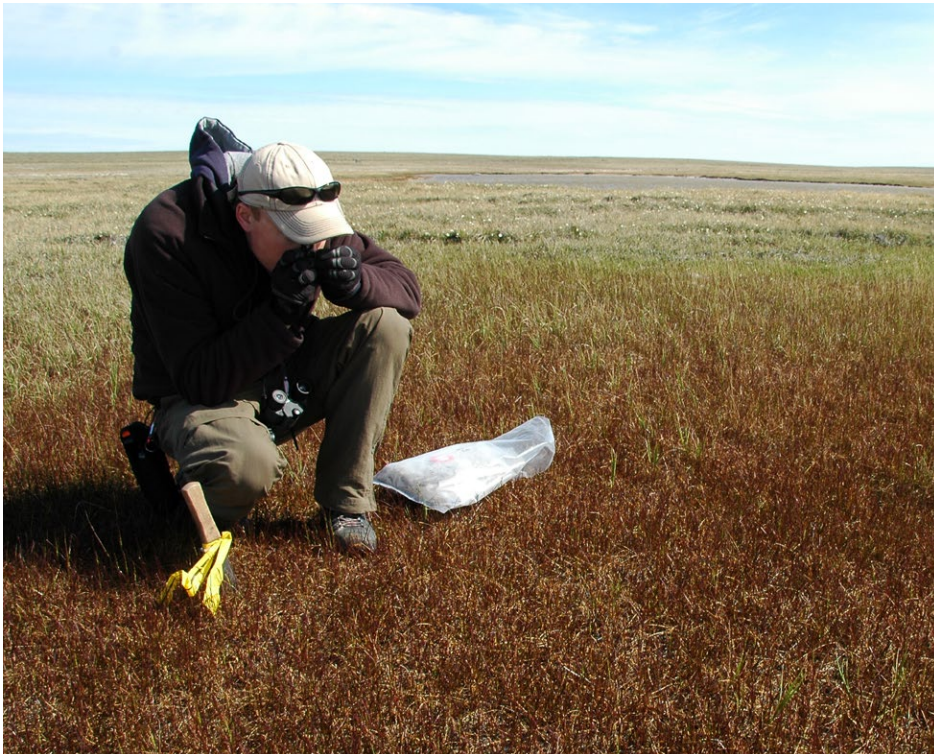
Chief Advancement Officer

Nature Foundation

levans@nature.ca

613-286-7606

nature.ca/foundation





nature.ca/foundation