

Eastern High Arctic

Represented by: Ellesmere Island
National Park Reserve



Tanquary Fiord, Ellesmere Island National Park Reserve

THE LAND:

Most of this region is desert - a lifeless frozen land. The Ice Age still holds sway over this land, and massive ice caps cloak much of this region. On Ellesmere Island, the ice cap is 2100 metres above sea level and hundreds of metres thick. The rugged peaks of the Innuitian Mountains, among the highest in Canada, pierce the ice. Like hands grop-



Signing ceremony, Ellesmere Island National Park Reserve

TOP OF THE WORLD

This is as far away as you can get in Canada. Here is a land of desolation and splendour on a grand scale. But it is also a land of intimate, fragile beauty - of delicate arctic poppies vibrating in the breeze, of miniature forests of lichens and heather, of subtle pastel shades and heady aromas.

ing to touch, glaciers extend icy fingers toward fiords reaching inland.

Along Ellesmere Island's northern coast, ice shelves, permanent aprons of ice held fast to the shore for thousands of years, cover vast areas of the Arctic Ocean.

The climate is "damn" cold. Even in July, the largely ice-covered seas refrigerate the land. The region is dry, receiving about the same precipitation as the Sahara.

VEGETATION:

Although most of the region is ice and rock, there are a few areas, called Arctic thermal oases, that have remarkably high biological productivity for the latitude. Although they cover less than two percent of the land, they are of critical importance to all life in the region. During the brief summer of continuous 24-hour sunlight, these oases burst into bloom in a frantic rush to

(Continued on next page)

complete life cycles before the onset of winter. In the most luxuriant oases, heathers and blueberries are found. More common are meadows of sedges and mosses, along with herbs that grow in dense cushions and mats. The entrances to animal dens, the ground around decomposed carcasses, old campsites and other "fertilized" spots stand out as having lush, more colourful vegetation than the surrounding areas.

WILDLIFE:

This region has few species of animals. Land mammals include Peary caribou, muskox, wolf, arctic fox, ermine, arctic hare and collared lemming. Conspicuous land birds include the horned lark, hoary redpoll, snow bunting and willow ptarmigan.

Peary caribou are smaller and paler than barren-ground caribou. Unlike their mainland relatives, they do not undertake long seasonal migrations or travel in huge herds. They occur in small scattered groups, sometimes in the most seemingly inhospitable habitats. Severe winters in recent years have caused the number of Peary Caribou to drop alarmingly.

Analogous to the terrestrial oases, marine "oases" - areas of high productivity - harbour populations of marine mammals and birds. Polar bear, walrus, ringed and bearded seals, and narwhals congregate in certain areas such as Lancaster Sound. Several large seabird rookeries are located near these rich feeding sites. Thick-billed murres, black-legged kittiwakes, northern fulmars, black guillemots, Thayer's gulls and glaucous gulls are the most common species.

Snow geese, eiders, oldsquaw and a host of shorebirds nest on the grassy tundra. The arctic tern also nests here on the shores of lakes and along beaches. This champion migrator follows the sun of summer, never knowing a day of winter in its life.

STATUS OF NATIONAL PARKS:

Ellesmere Island National Park Reserve (37,775 km²), Canada's second largest national park, represents this natural region. A land of ice, it is dominated by hundreds of glaciers. Mount Barbeau (2,600 m), the highest mountain in eastern North America, towers over vast ice fields. The long bitterly cold winters, brief cool summers and low precipitation have created polar desert conditions throughout much of the park, with little vegetation or wildlife. However, lowland areas, such as the one surrounding Lake Hazen, the most northerly lake in Canada, are relatively lush. In these thermal oases, arctic hare often congregate in groups of hundreds. Small herds of muskox and Peary caribou, a few wolves, numerous arctic foxes and about 30 species of birds thrive in meadows of lush grasses and bright arctic flowers.

Hundreds of archaeological sites in the area tell of ancient Inuit peoples who passed

(Continued on next page)



Lake Hazen

Natural Region 39

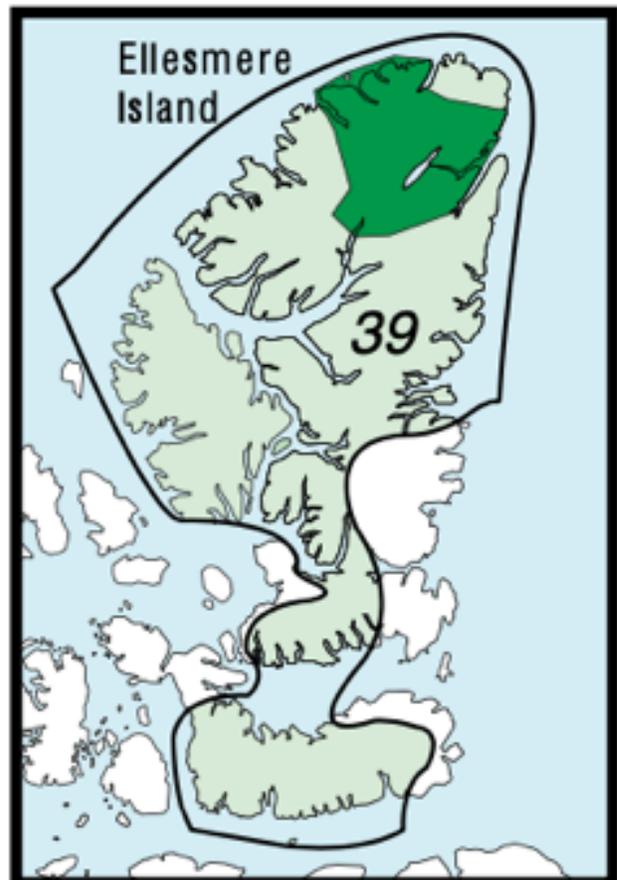


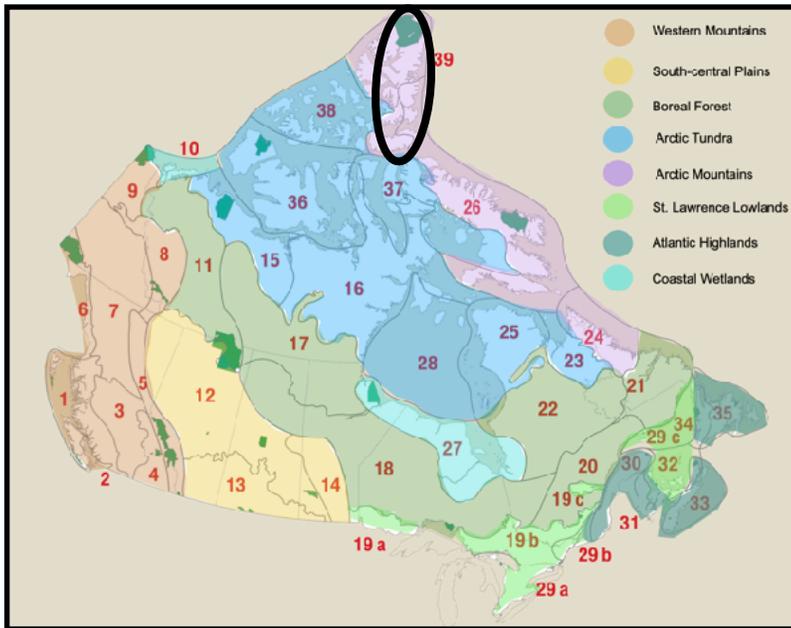
Ward Hunt Ice Shelf

this way 4,000 years ago. The remains of Fort Conger, a scientific research base established in 1881, is a site of historic significance. Wooden shacks built by the Arctic explorer Robert Peary, of North Pole fame, still stand on the site.

The agreement between the federal government and the Government of the Northwest Territories setting out the terms and conditions for establishing Ellesmere Island National Park Reserve was signed in 1986. The historic signing ceremony took place on a snowy September day on the shores of Tanquary Fiord. Flags snapped and a lone arctic hare hopped by as the

coldest park agreement signing ceremony in the history of national park establishment took place. Under the Nunavut Land Claims Agreement, signed in 1993, government and Inuit are negotiating an Inuit Impact and Benefits Agreement to formally establish northern Ellesmere Island as a national park of Canada. It is expected that these negotiations will be concluded in 1996.





Major Land Uses

Main Communities

- Alert
- Hazen Camp

Aboriginal Peoples

Uninhabited (people of the Dorset culture lived here about 1000 years ago)

Parks and Natural Areas

John Franklin Expedition wintering site

Further Information

Alert, at the northern tip of Ellesmere Island, may be the most northerly settlement in the world. This photo must have been taken in early summer because it is light. At 82 degrees North latitude, winter darkness lasts well past what southerners would consider the end of winter.



39 Eastern High Arctic

300 km

Ellesmere Island

Greenland

Beaver Pond site

Devon Island

Franklin
wintering
site

Image Landsat / Copernicus
Image IBCAO
Image U.S. Geological Survey

Google Earth

Imagery Date: 12/31/2020 82° 39.303' N 90° 26.868' W elev -784 m eye alt 1317.12 km





Without getting too sentimental, one sees a landscape stripped to its absolute minimum: water, land, sky.

Bruce McLeod took these pictures while visiting the south shore of Devon Island during a tour of the North West Passage region of Nunavut.





Bruce McLeod

Life is concentrated in the relative warmth of the ocean, which never drops below -5 C. Even terrestrial animals like this polar bear seek aquatic food.



Bruce McLeod



Bruce McLeod



Bruce McLeod

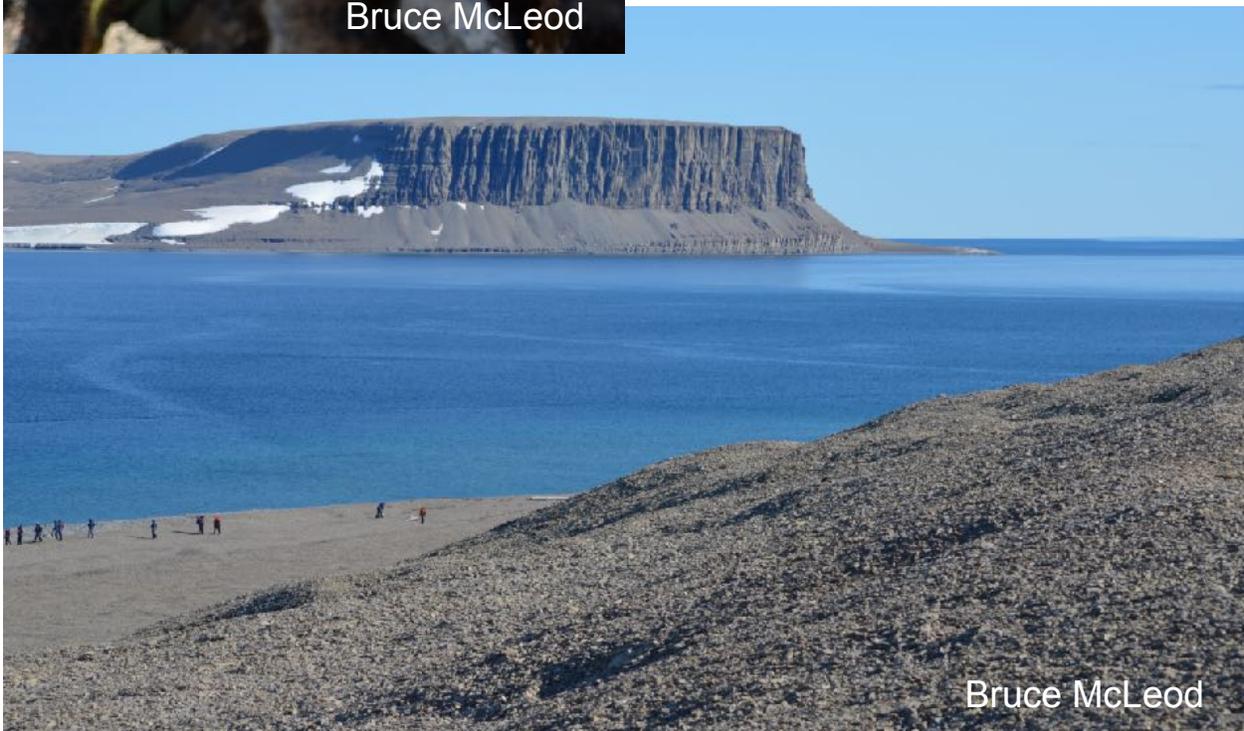


Bruce McLeod



Bruce McLeod

With most of the land being totally bare of vegetation, it cannot really be called “tundra”. But even here, a scattering of low wildflowers, like this Arctic Poppy, survives in sheltered nooks.



Bruce McLeod



Natalia Rybcznski



Natalia Rybcznski

Natalia Rybczynski, of the Canadian Museum of Nature, explored a rich fossil locality in central Ellesmere Island. Unlike the modern environment, the ancient climate, 2.6-5.0 million years ago, supported a rich forest, with fossils of seven trees and numerous animals. This pile of sticks has been interpreted as the earliest beaver dam ever found. Note the tooth marks on the close-up of the stick. (After millions of years, the wood could still be burned!)



Bruce McLeod

John Franklin and his crew spent the long winter of 1845 here on the southwest shore of Devon Island. The remaining wooden structure speaks more to the slow rate of decay in the Arctic than the quality of the makeshift shelter. The rusty debris consists mainly of steel hoops from wooden kegs, used to store a variety of goods.



Bruce McLeod