

LIFE ON ICE



**A PORTRAIT OF THE LIFE ABOVE, BELOW AND WITHIN
THE SEA ICE OF BAFFIN ISLAND.**



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ARTIC SEA ICE is considered a remote, hostile environment — a barren impediment to shipping lanes. Yet this same ice is the major habitat of some of the most spectacular wildlife on earth.

In the process of freezing, drifting and finally thawing during a multi-year cycle, ice acts as an energy pump, driving the circulation of cold seas and deep oceans. At the bottom of the ice is an inverted, submarine “landscape” with a rugged beauty and ecology of its own. Here, algae have evolved to exploit the dim light, the low temperatures, and the chemistry and physics of frozen sea water. These algae form the basis of a food chain that culminates in such singular creatures as the narwhal, the polar bear, and the harp seal.

The zone where ice, open water and air meet — the edge of ice — is the place where living organisms concentrate. Whether that edge is along a narrow crack or bordering a vast area of open water, it is here that air-breathing marine mammals and birds have access to the food supply on the underside of the ice.

This film gives a new perspective on Arctic life processes and informs viewers of the intricate nature of sea ice. Unique underwater photography shows rare views of sea birds, seals, whales and walrus diving beneath the canopy ice. Micro- and macro-photography enhance the worlds within individual ice crystals, and fine aerial and landscape shots further reveal the exceptional beauty of Arctic ice in its varying forms, deepening our understanding of its significance.

Adapted from the longer *Edge of Ice*, this film is a must for all who want to know more about the frozen northern seas.

Audiences

General audiences; grades 4 through university; special interest groups (environmental scientists; oil rig operators, northern peoples, ice-breaking engineers, hunters, mariners and educators for whom this eco-system is of great significance).

Some Questions for Discussion (Elementary and secondary)

Pre-screening

What notions do you have about Inuit life in the high Arctic?

Post-screening

1. Why is ice so vital both for the Inuit and for the polar ecosystem?
2. What forms the basis for the polar ecosystem? Why is the polar cod called the key link between the smaller and upper levels in the food chain?
3. What adaptations did Arctic animals make in order to survive?
4. Why are polynyas so significant in the Arctic seascape?

Activities

Research and report on three of the following: planktonic and ice-loving algae; diatoms; protozoa; herbivorous crustacea; roundworms; polar cod; walrus; beluga; narwal; seals; polar bears; polynyas.

Written and Directed by
William Hansen

Director of Photography
Mosesee Kiponik

Edited by
Bruce Mackay

Underwater Camera
William Hansen

Micro/Macro Camera
Eric Chamberlain

Aerial & Time-lapse Camera
Rick Bujold

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Vlasta Vrana

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Sound Editor
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Executive Producer
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**This film is adapted from
the National Film Board
of Canada production
*Edge of Ice***

**Color
Screening time:
27 minutes 49 seconds**

**16 mm: 106C 0186 136
VHS: 113C 0186 136
Beta: 114C 0186 136
3/4": 116C 0186 136**



National
Film Board
of Canada

Office
national du film
du Canada

© National Film Board of Canada, 1988
P.O. Box 6100, Montreal, Quebec H3C 3H5

Printed in Canada