

Pangnirtung Hiking Trails
Type of Study: Plans/strategies
Date of Report: 1983
Author: Peter Strahlendorf
Catalogue Number: 11-32-40

PANGNIRTUNG COMMUNITY TOURISM PLAN YEAR 2

A report prepared pursuant to Contract No. SC 207277
for
GNWT Economic Development and Tourism
Pangnirtung, N.W.T., Canada

September, 1983

Peter Strahlendorf Toronto, Canada

PREFACE

This report was prepared pursuant to Contract No. SC 207277 between the Government of the Northwest Territories and Peter W. Strahlendorf under the supervision of Gary Magee, the Economic Development Officer in Pangnirtung, and in liaison with the Pangnirtung Tourism Committee operating under the Pangnirtung Hamlet Council.

Fieldwork in Pangnirtung and vicinity was conducted from June 15 to August 26, 1983. Further research and preparation of this report was done in the south prior to a workshop summarizing the summer's activities to be given in Pangnirtung on October 6, 1983 to the Tourism Committee and the Hamlet Council.

ACKNOWLEDGEMENTS

Appreciation is expressed for the assistance of Gary Magee in particular, without whom the fieldwork would not have proceeded in a timely fashion. Further thanks is extended to members of the Pangnirtung Tourism Committee for their advice and to Lodie Maniapik, Tourism Trainee, for his help throughout all phases of fieldwork. Information provided and the generosity extended by Ray Brenamen of Parks Canada and Ross Peyton was much appreciated. For the Kekerten phase of the fieldwork the information and advice provided by archeologist Marc Stevenson of the Prince of Wales Northern Heritage Centre was invaluable.

ABBREVIATIONS

GNWT - Government of the Northwest Territories
PWNHC - Prince of Wales Northern Heritage Centre

PC - Parks Canada

GSC - Geological Survey of Canada MMM - Marshall Macklin Monaghan HBC - Hudson's Bay Company

CONTENTS

Part		Page
	Introduction	1
I	Ukama and Ikuvik Trails	5
II	Photography	9
ш	Brochure: Walking Tour of Pangnirtung	16
IV	Nuvoatiakalla: Traditional Inuit Summer Camp	41
V	Kekerten and Ussualuk Whaling Stations	61
VI	Aulatsivikjuaq: Glaciation Trail	96
νп	Inuguaruluk: Char Fishing Activity	122
VIII	Recommendations	130
IX	Workshop	146

PANGNIRTUNG COMMUNITY TOURISM PLAN YEAR 2 1983

Peter Strahlendorf

Introduction

The Pangnirtung Community Tourism Study prepared by Marshall Macklin Monaghan in 1982 recommended that a "Structured-Specific Market Approach" was best suited as a community tourism strategy for the Pangnirtung community. The approach or strategy was described as follows: "create structured (packaged programs and services) tourism development opportunities for specific tour group markets".

This strategy was adopted by the Pangnirtung community. Other than the development and upgrading of a full range of accommodation and facilities, programs and services to meet tour group requirements, an important part of this strategy is the development of packaged tours emanating from the community to a variety of sites in the area.

Another important component of the chosen strategy is that the Tourism Committee, representing major organizations in the Hamlet and operating as a subcommittee of the Hamlet Council, is responsible for monitoring and controlling the pace and form of tourism development in and around the community. This is a novel approach compared with the open market strategy adopted, usually by default, in the southern communities where tourism is a significant economic activity.

The MMM study identified 26 individual projects which would implement the chosen tourism strategy. The development of tour packages and activities or attractions for visitor use is one of 4 implementation programs suggested. The others relate to: (1) hospitality/information; (2) infrastructure; and (3) industry organization.

During the summer of 1982 two trails, the Ukama and the Ikuvik, were constructed which both begin in the Hamlet. Interpretive brochures for these two trails were prepared during the winter of 1982/83 and were available for distribution during the summer of 1983.

This report is concerned with the projects initiated under Contract No. SC 207277 for the summer of 1983, Year 2 of the five year tourism plan suggested by the MMM study. The following projects were scheduled for Year 2:

- (1) repair and completion of the inukshuks marking the Ukama and Ikuvik trails and erection of trailhead signs at both trails;
- (2) photographing the common flora of the area;
- (3) complete the construction of a trail to the site of a prospective traditional Inuit summer camp, design a suitable trailhead sign and develop a plan for the construction and use of the summer camp;
- (4) prepare a draft brochure on a walking tour of Pangnirtung;
- (5) appraise the tourism/interpretive potential for boat tours to Kekerten and Ussualuk whaling stations and prepare recommendations for the development of the sites (the latter work to replace the original requirement of a draft brochure);
- (6) appraise the tourism/interpretive potential of the proposed Aulatsivikjuaq trail with recommendations for development;
- (7) recommend a plan for the development of a day-use fishing site selected by the Tourism Committee; and
- (8) deliver a workshop for the Tourism Committee and Hamlet Council on the status of the development projects and recommendations for Year 3.

During the course of the summer there were minor changes made in the above list of projects. Each of the projects will be discussed in depth in the following pages. At the time of writing workshops are planned for October 5th in Frobisher Bay and October 6th in Pangnirtung. Portions of this report are to be translated into Inuktitut. The draft brochure on the walking tour of Pangnirtung is to be translated in full. While

recommendations for each of the projects will be discussed in their respective parts of this report, for translation purposes, all recommendations are summarized in a separate section.

A discussion of specific development projects for 1984 is contained in the recommendations section of this report.

There were tourism development projects outside the purview of Contract No. SC 207277 which proceeded during the summer of 1983. A small wooden building near the community meat freezer was transformed into a Tourism Centre, Fig. 1. Members of the trail crew painted the building, put a NWT flag up and mounted a large sign on the front of the building. The porch was rebuilt and stone and earth steps were built to facilitate access to street level. The office was furnished and decorated with posters. A telephone was put in.

The Community Host programme continued from its inception last year. Unfortunately a uniform for the Community Host had not been ordered in time for the season. Jaypetee Etuangat, the Host, indicated that he continued to have problems at the airport with visitors not recognizing him as the Community Host. Towards the end of summer an assistant to the Community Host was hired. The Community Host programme appears to be working very well and it is apparent that the position will become increasingly important as further tourism projects are developed.

Two community maps were posted on the airport building and on the outside of the Tourism Centre, Fig. 2. The bulletin board portion of the signs were not used. Suggestions for its use are given in the recommendation section of this report.

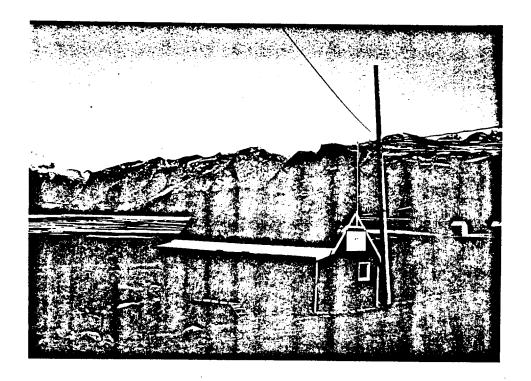


Fig. 1. The new Pangnirtung Tourism Centre, 1983.

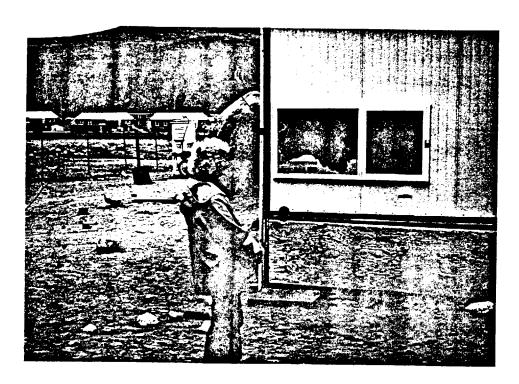


Fig. 2. The community map mounted outside the airport building. $\ensuremath{\text{a}}$

PART I UKAMA AND IKUVIK TRAILS

The inukshuks along the Ukama and Ikuvik Trails, constructed during the summer of 1982, were repaired. Trailhead signs were erected, Figs. 3 and 4.



Fig. 3. Trail crew building trailhead cairn at beginning of Ukama Trail.



Fig.4. Trailhead sign at Ikuvik Trail.

The Ukama Trail, which follows a narrow loop up the Duval River valley, was examined early in the summer. Of the 34 inukshuks and markers along the trail, 16 (47%) were completely knocked down. Only 6 (18%) needed superficial or no repair at all.

The Ikuvik Trail to the top of Mount Duval was in a similar condition. Of the 41 inukshuks or markers along the route, 18 (44%) were completely down. Only 8 (20%) needed superficial or no repair.

"Non-success" rates of 82% and 80% for the Ukama and the Ikuvik Trails respectively meant that a good portion of the trail crew's work this summer was redoing last year's work. Such extensive repair is expensive and would become impractical if every trail operated by the Tourism Committee in the future needed such maintenance. One is reminded of the myth of Sisyphus who spent eternity pushing a rock up a hill, watching it roll down and pushing it back up again.

While vandalism may have been a contributing factor to the decline and fall of the inukshuks it became apparent that the following factors were more significant:

- (a) use of spherical rocks as opposed to flat rocks having more contact area;
- (b) use of cracking and distintegrating rocks;
- (c) use of glue on wet rock;
- (d) no glue used at all; and
- (e) lack of small rock wedges to increase the area of contact.

It is possible that the glue used, #8167 Swift's Adhesive, is not suitable for building inukshuks. The primary concern while repairing the inukshuks this summer was to use sufficient glue and rock wedges so that each inukshuk would be firm enough to resist a shove. A review of the inushuks next year during the spring of 1984 should reveal whether the glue is defective (it may become brittle and crack during the cold of winter) or whether vandalism is a real problem.

There is a problem with the Ukama Trail and the accompanying brochure. There is no correlation between the numbers of the inukshuks in the brochure and the place of the inukshuk along the trail. In other words the brochure refers to 11 inukshuks (and so does the trailhead map) whereas there are in fact 21 inukshuks along the route.

Either the inukshuks along the Ukama Trail should have a number paint-stenciled on a base rock, or the inukshuks in the brochure should be renumbered. It is recommended that the former be done. If the latter, then the numbering becomes useless. People lose count of how many inukshuks they've passed. The Ikuvik Trail brochure does not refer to numbered inukshuks so the problem does not arise.

There are some inaccuracies in the Ukama Trail brochure:

- (a) At Inukshuk 2 the first two sentences should read: "Take note of the ring of stones in front of the inukshuk. At the base of the large rocks ahead of you ...";
- (b) At Inukshuk 4 delete from "Crustose lichens..." to and including "...in short supply". At the end of this portion of the text add: "A third form of lichen, the foliose lichens, is represented by a species called rock tripe which may be found further along the trail by the shore of the Duval River. Rock tripe is a leafy black and tan lichen which contains sufficient nutrients to be used as food. It was eaten by native people across Canada, including the Inuit.";
- (c) At Inukshuk 6 replace the first sentence with: "The spongy patch of vegetation you are about to cross contains a moss known as sphagnum."

Cement and rock cairns were built at the beginning of both trails. They took the 3 members of the trail crew 4 days each to build. About \$50.00 worth of cement was used for each cairn. Cement was purchased from the Hamlet at \$12 a bag. The trailhead signs were bolted onto square, welded steel frames. These were welded to short concrete reinforcing rods which were imbedded in the cairn cement. The frames were built in the Hamlet garage. The Trails were officially opened by the Commissioner of the N.W.T. during the summer, Fig. 5.

Visitor survey boxes should be constructed and placed at the beginning of each trail. A simple mail box structure on a post would be sufficient for visitors to deposit completed questionnaires. Alternatively, a box could be placed outside the Tourism Centre for questionnaires from all trails and trips.

Consideration should be given to the construction of registry boxes located halfway along each of the trails. A hiker would pull down the door to reveal a registry pad. Name, place of residence and number in the party would be noted. This statistical data will provide usage information and facilitate planning.

Both the Ikuvik trailhead sign and the brochure give the wrong elevation for Mount Duval. At some point this should be corrected. The last 3 lines in the Ikuvik brochure should be deleted. Apparently the Inuktitut spelling of Ikuvik is incorrect on the trailhead sign (and the brochure map?).



Fig. 5. The Commissioner of the NWT opening the Ikuvik Trail, 1983.

PART II PHOTOGRAPHY

Pursuant to Contract No. SC 207277, photographs of Arctic plants were taken over the summer. Over two dozen species of flowering plants were photographed. Several species of non-flowering plants such as mushrooms, horsetails and mosses were also photographed. A list is included at the end of this section. 215 plant photographs were taken.

The flower slides can be used for a number of purposes. A slideshow with a botany theme or a general arctic ecology theme to be shown at a Visitor Centre is an obvious use. The pictures can be used as illustrations in a number of prospective brochures. They can be enlarged and sold to visitors to the Visitor Centre. They can be used for postcards. It is recommended that a botany brochure, or booklet, be prepared which could be used by a visitor on any number of trails or trips.



Fig. 6. Bearberry, Arctostaphylos alpina (L.) Spreng.

Other than the flower photographs, approximately 1,875 photographs were taken of the following subjects:

- (1) buildings in Pangnirtung:
 - (a) historical
 - (b) contemporary
- (2) Pangnirtung
 - (a) from the mountain
 - (b) from the water
- (3) community activities in Pangnirtung:
 - (a) Canada Day celebrations
 - (b) bridge construction
 - (c) infrastructure
 - (i) water
 - (ii) pump-out
 - (iii) garbage
 - (iv) firetruck
 - (v) sealift
 - (vi) airport
- (4) Vicinity of Pangnirtung
- (5) Cumberland Sound
- (6) Fauna
 - (a) birds
 - (b) insects
- (7) tourism development projects:
 - (a) trails and trailhead signs
 - (b) opening of trails by the NWT Commissioner
 - (c) community map signs
 - (d) Tourism Centre
 - (e) campground
- (8) Kekerten and Ussualuk whaling stations:
 - (a) physical site
 - (b) artifacts and features
 - (c) activities of archeologists

- (9) Summer Camp site and trail
- (10) Fishing Trip site
- (11) Aulatsivikjuaq site
- (12) Avatuktoo site
- (13) Frobisher Bay
- (14) New Bedford Whaling Museum

The above photographs were taken in anticipation of the development of a slide collection to be kept and controlled by the Pangnirtung Tourism Committee. The chosen slides should be indexed and catalogued for easy retrieval.

Ross Peyton generously allowed his photograph collection to be reviewed and photographs were copied. The following subjects were of interest:

- (1) number and location of buildings in Pangnirtung in the 1950's;
- (2) patients in the St. Luke's Hospital;
- (3) celebrations and games outside the Anglican mission;
- (4) whaling in Cumberland Sound and processing of the catch at the HBC station in Pangnirtung;
- (5) white fox trade;
- (6) construction of Peyton lodge;
- (7) the first motor vehicle, the first post office and the first election campaign in Pangnirtung;
- (8) the damage caused by the 1976 windstorm.

On September 9, 1983 the National Museum library, 2086 Walkley Road, in Ottawa was visited. With the assistance of Chris Kirby, (613) 998-3926, 66 photographs of Dewey Soper's activities in Pangnirtung in the 1920's were copied. Cost: \$2.15 for 4" x 5" black and white; 11" x 14" are \$9.40 each. The following subjects were of interest:

- (1) buildings in Pangnirtung in 1920's;
- (2) Inuit tupeks and kameks;
- (3) individual Inuit.

The photographs in Southern Baffin Island: An Account of Exploration, Investigation and Settlement During the Past Fifty Years, by A.E. Millward, 1930, Department of the Interior, King's Printer, Ottawa, were copied. The following subjects were of interest:

- (1) white whale hunting;
- (2) Wakeham expedition at Kekerten 1897;
- (3) Inuit at mission in Pangnirtung;
- (4) construction of RCMP post in Pangnirtung in 1923.
- (5) Inuit activities, tupek & kayak, fishing;
- (6) RCMP launch "Lady Borden";
- (7) buildings in Pangnirtung.

Several photographs were obtained from N.F.B. Phototheque, Record Annex Building, Room 108, Tunney's Pasture, Ottawa, with the assistance of Sue Byrne (613) 593-5826. These were pictures of the sealift in 1951, J.A. Houston displaying Cape Dorset carvings to the residents of Pangnirtung and the Christmas airdrop by the Armed Forces in 1965. See Fig. 7. Cost: \$7.50 per black and white print.

There are some photographs of Pangnirtung in the 1960's held at D.I.N.A., Ottawa, (613) 994-1333 but they are of poor quality and are not available for release.

Chuck Beckstead, (613) 995-4048, of the Geological Survey of Canada photograph library, indicated there are many photographs of the GSC's activities in Baffin Island but that it is unlikely that the collection has pictures of anything more than rock formations and the geologists' campsites and perhaps modes of transportation. They are not indexed geographically (strangely enough).

A selection of aerial photos was obtained at a cost of \$2.50 each and \$4.00 handling from the Aerial Photo Sales office of the GSC at 615 Booth Street in Ottawa, (613) 995-4560 was visited.

				Year
(1)	Pangnirtung		roll A 25553 #'s 89-91 roll A 25553 #'s 71-74	1980 1980
			roll A 13743 # 57	1953

(2)	Summer camp site	(a)	roll A 25553 #'s 38 & 39	1975
(3)	Fishing site	(a)	roll A 16255 #'s 97 & 98	1958
(4)	South shore of Pangnirtung showing Pangnirtung and shoreline to summer camp site	(a)	roll A 16255 # 70	1980
(5)	Aulatsivikjuaq	(a) (b) (c)	roll A 16255 #'s 36 & 37 roll A 16817 #'s 25 & 26 roll A 16223 #'s 3-5	1959 1959 1959
(6)	Kekerten	(a)	roll A 16255 #'s 131 & 133 (#132 was missing but would be the best picture)	1956

Portions of the above aerials were rephotographed.

There was insufficient time to visit the Public Archives at 395 Wellington, 3rd floor, Ottawa. Chris Seifried, (613) 992-3884, of the National Photograph Collection, indicated photographs are indexed by subject. $8" \times 10"$ photos are \$5.50 and $4" \times 5"$ contacts are \$2.00. From examination of various articles and books the following photographs should be ordered:

PA 102680, 102682, 101931, 84687, 101940, 101941, 99111, 84686, 99112, 53579, 84688

If a Visitor Centre is to be constructed in Pangnirtung a photographic archive collection should be established. The photos can be used for displays, publications, historical research and can be rephotographed as slides for audiovisual shows.

It is suggested that an effort be made to obtain copies of photographs now in the hands of individuals as well as in the historical records of the HBC, the RCMP, the Anglican church, etc. Particular consideration should be given to the means by which collections in the hands of individual residents of Pangnirtung can be examined. Some individuals, for a variety of personal reasons, are reluctant to allow their photographs to be viewed, let alone copied.

Plants Photographed

Flowers

Willow

Mountain sorrel Knotweed (Bistort)

Starwort

Mouse-ear chickweed

Sandwort Moss campion Bladder campion Buttercup

Arctic poppy Scurvy grass Whitlow-grass Nodding saxifrage Prickly saxifrage

Cinquefoil Mountain avens Crowberry

Broad-leaved willow-herb Large-flowered wintergreen

Labrador tea Arctic heather

Lapland rhododendron

Bearberry Bilberry Diapensia Thrift Lousewort Harebell Sunflower Dandelion

Oxyria digyna (L.) Hill Polygonum viviparum L. Stellaria longipes Goldie Cerastium alpinum L. Arenaria peploides L. Silene acaulis L.

Melandrium affine (J. Vahl) Hartm.

Ranunculus sp. L. Papaver radicatum Rottb.

Cochlearia officinalis L. Draba sp. L.

Saxifraga cernua L.
Saxifraga tricuspidata Rottb.
Potentilla sp. L.

Dryas integrifolia M. Vahl Empetrum nigrum L. Epilobium latifolium L. Pyrola grandiflora Rad.

Ledum decumbens (A.T.) Lodd Cassiope tetragona (L.) D. Don

Rhododendron lapponicum (L.) Wahlenb.
Arctostaphylos alpina (L.) Spreng.
Vaccinium uliginosum L.
Diapensia lapponica (L.)

Armeria maritima (Mill.) Willd.

Pedicularis sp. (L.) Campanula uniflora L. Arnica alpina (L.) Olin

Taraxacum lapponicum Kihlm

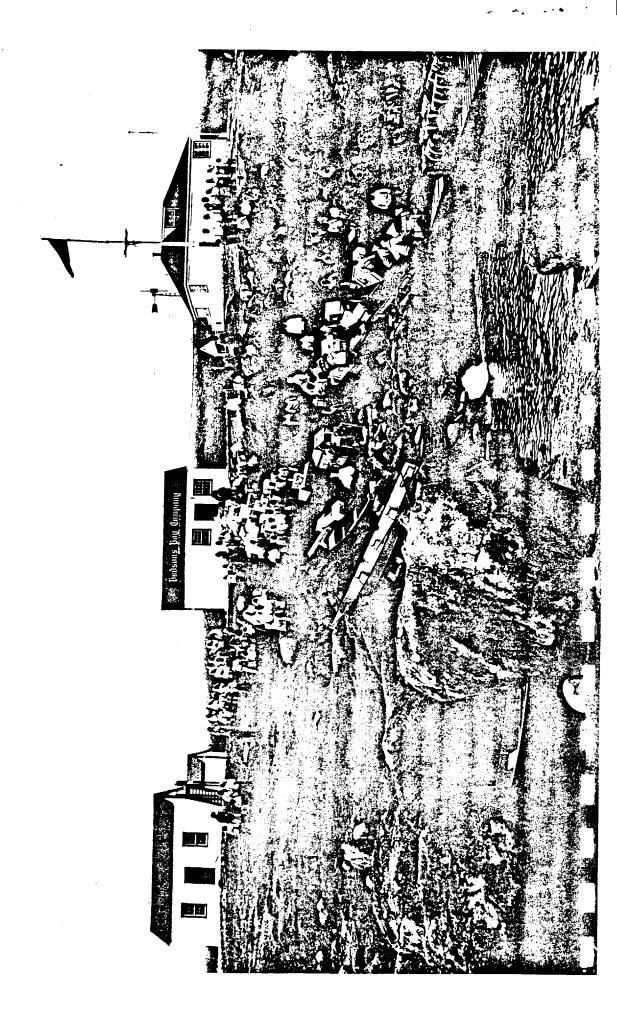
Non-flowering

Cotton grass

Horsetail Algae Mosses Lichen Fern Mushrooms Eriophorum scheuchzeri and angustifolium

Equisetum sp.

Fig. 7. Inuit at Pangnirtung unloading sealift supplies from C.G.S. C.D. Howe in July, 1951. Photograph by W. Doucette. Courtesy of N.F.B. of Canada, #59572.



.

H3 1

PART III

BROCHURE:

WALKING TOUR OF PANGNIRTUNG

An interpretive brochure for a walking tour of Pangnirtung has as its objectives:

- (a) information about services available in the community;
- (b) satisfaction of curiosity about the history and socioeconomic nature of the community; and
- (c) stimulation of curiosity so that the visitor will take other trips and hikes and engage in further inquiries.

While the text of other brochures might have as their themes Arctic habitats, glaciological formations or Arctic whaling, a brochure on a walking tour of Pangnirtung has as its central theme an introduction of the history of and life in the Pangnirtung community for the visitor. As most visitors to Pangnirtung are from the south and are not Inuit, the perspective of such brochure should be comparative, that is, how and why life is different in Pangnirtung.

The kinds of questions which should be answered are:

:

* * *

£

Mossie

- (a) how and why did Pangnirtung, as a community, come into existence and how has it grown over the years;
- (b) who lives in Pangnirtung and what is day-to-day life like for the residents of Pangnirtung;
- (c) what are the origins of the buildings in Pangnirtung and what current activities are carried on in them;
- (d) what is the economic base of the community;
- (e) what are the special problems (and pleasures) of living in an Arctic environment; and
- (f) where can the visitor go for a particular good or service.

Unlike some other themes, introducing the visitor to the history of and life in Pangnirtung cannot really be done with a two page brochure. What is envisaged in the following draft text and suggested visuals is that a relatively extensive booklet be prepared with maps, photographs and a reasonably in-depth discussion of ideas and points of interest.

If the draft brochure is too expensive to publish, then it can be edited down to a reasonable size, but preferably consideration could be given to selling the brochure to visitors at the Visitor Centre. If the latter choice is made, the advertising potential of the brochure will not be realized unless the brochure could be mailed free of charge in response to written or telephoned inquiries from prospective visitors but sold to visitors once they have arrived in Pangnirtung.

There is a problem with the kind of information contained in the draft text. It easily becomes out-dated. The brochure was not written in general form as, for example, Kenn Harper's booklet "Pangnirtung". It might be too expensive to revise a large, illustrated booklet every two years. If it is too expensive then there are two alternatives. The text can be edited to remove some information that will obviously be rapidly out-dated. Other information, such as details of trips and hikes available, could be isolated on a back cover. Every two years the cover alone could be reprinted with new information. In the alternative, the brochure could be a cheap, photocopied "paper". It would contain a map. Possibly some illustrations could be included but these could be simple sketches which would photocopy well. Could the booklet be sold and result in sufficient income to justify rewriting and reprinting a glossy, expensive booklet every two years?

How the booklet is illustrated will depend on cost considerations outside the purview of this report. There are some suggested illustrations at the end of this section. There are hundreds of other possible pictures contained in the collection of slides referred to in Part II of this report. As a good portion of the text is historically oriented it is recommended that a number of historical photographs be reproduced. For interpretive purposes it is more worthwhile to have a picture of something the visitor can't see (such as a photograph of the old whaling station in operation) than it is to have a picture of a contemporary building a visitor can see with his or her own eyes. There should, however, be photographs of some contemporary buildings as there will be many people in the south who will examine the Pangnirtung brochure when deciding whether to make the trip and they will be interested in such pictures.

The Dewey Soper photograph collection has a number of interesting historical scenes which would be appropriate. There are undoubtedly more in the Public Archives in Ottawa.

The slide collection put together during the summer of 1983 has relatively few "people pictures". There are few photographs of people doing things inside, eg: preparing prints, weaving, operating the radio station, having furs bought at the rear of The Bay. These would be good pictures to have in a Pangnirtung brochure. This may be something that will have to be arranged or set up during the winter of 1983-84.

DRAFT TEXT OF PANGNIRTUNG BROCHURE

The following is the draft text submitted pursuant to Contract No. SC 207277:

Welcome to Pangnirtung! "Pang", as it is locally nick-named, is a hamlet of over 1000 people situated on Pangnirtung Fiord, Cumberland Peninsula, Baffin Island, Northwest Territories, Canada. It lies a mere km south of the Arctic Circle as the raven flies.

For those who like numbers, Pang is at 66 08'N, 65 43'W. It lies 246 km north of Frobisher Bay, 246 km north of Montreal and 1929 km northeast of the capital of the N.W.T., Yellowknife.

The slogans are endless: "Canada's Norway of the North", because of the numerous glacier-created fiords in the area; "Home of the Eskimos", or "Inuit" as they prefer to call themselves; "Land of the Midnight Sun", because of the 24 hours of daylight in the summer; "Land of the Arctic Char", the premier sport and eating fish of the world; and "Gateway to Auyuittuq National Park" (Canada's first Arctic park), as the Park is only an hour away by boat.

This booklet will provide the visitor to Pang with directions to all the local services needed for a comfortable stay as well as provide answers to the many questions newcomers have about the history of Pang, the lifestyle of the Inuit and the economic basis of the area.

VISITOR SERVICES

Pangnirtung has an active Tourism Committee under the Hamlet Municipal Council, both run by the local Inuit. There are dozens of trails, activities, day-trips and brochures now in the planning stages which we hope will give the visitor to Pang a more enjoyable and informed visit in the years to come.

Currently, the Tourism Committee operates a Tourism Centre from which the Community Host provides information and advice to visitors. The Community Host will also give short impromptu tours, serve as an interpreter (as the predominant language in Pang is Inuktitut), and will arrange fishing trips and tours by boat with the dozen or so outfitters in the hamlet. Most places of interest outside the immediate vicinity of Pang are accessible only by water. This includes Auyuittuq Park (unless you are prepared for a two day hike over rough terrain).

There are two trails leading out of the hamlet, the Ukama and Ikuvik Trails, the former a 2-3 hour walk up the Duval River valley and the latter a 4-5 hour climb to the top of Mount Duval. The trailhead signs are located on the accompanying map and interpretive brochures are available. This booklet outlines a walking tour of Pangnirtung itself. Through the Community Host a day-trip to a traditional Inuit summer camp can be arranged. The Community Host can also organize a trip to a fishing site on Cumberland Sound. Information about future trails and activities may be obtained at the Tourism Centre.

The average maximum temperature in Pang during July is 46 F and a thick jacket and a raincoat are sufficient. If a trip by boat is contemplated then thermal underwear, sweater and wind and rain resistant pants and jacket are necessary.

FOOD AND ACCOMODATION

Although a new hotel and visitor centre is being contemplated for the future, there is currently one hotel in Pang, Peyton Lodge. Meals, showers and laundry service are available, although whether you are assigned a room with a flush toilet or the venerable "honey bucket" is a matter of arctic roulette.

There is also a campground located a few minutes walk from the hamlet where tent platforms and outhouses are available.

Fast food can be purchased at the Coffeeshop and Pang Pizza in the hamlet. Groceries may be obtained at the Inuit Co-op or The Bay. Prices are high compared to those in the south, but remember that with the exception of drygoods brought in by ship twice in the summer, and some char and caribou available at the Co-op, all other food must be flown in at great expense. The Bay is open Tuesday to Saturday and the Co-op is open Monday to Saturday.

Keep in mind that Pang is "dry" as in 1977 the hamlet residents voted against the sale or possession of alcohol within 15 miles of the hamlet. You will therefore not find licenced premises in Pang and you are advised not to bring alcohol into the hamlet.

WHO LIVES IN PANG?

Ninety-five per cent of the residents are Inuit, a people with their own language and culture who have lived in the Arctic and adapted to its ways for thousands of years. There are only a handful of non-Inuit who have lived in Pang for more than five years. The balance of non-Inuit are transient government, R.C.M.P., education and nursing personnel who stay from one to five years.

During the summer months, after the ice has left the fiord at the beginning of July, many of the hamlet's residents leave for summer camps in Cumberland Sound. This is not the northern equivalent of a stay at the cottage as this seasonal movement is a continuation of a historical pattern of dispersement to summer hunting and fishing sites. While the technology has changed since the days of the sealskin tent, harpoon and fish spear, the caribou and the char have remained as Inuit food staples.

Demographic statistics indicate that there are 5 people per household and that 75% of the population is under the age of 25. Such a youthful population means that in the years to come developing employment opportunities in the hamlet will be a major task.

The modern Inuit are descendants of people who crossed the Bering Strait from Asia into what is now Alaska about 5000 years ago. Archeologists speak of several successive cultures which evolved over the millenia. The immediate ancestors of the Inuit were the people of the Thule Culture. The Thule Culture originated in Alaska 1000 years ago and moved eastward as far as Greenland.

The Thule people were whale hunters and developed an elaborate technology which included sophisticated harpoons and the umiaq, a large skin-covered boat. They used domesticated dogs to pull their sleds and in the winter they lived in igloos when travelling. They had large settlements of permanent winter houses of stone, whalebone and turf which they temporarily abandoned in summer for skin tents.

Archeologists think that 200 years ago the Thule Culture experienced dramatic change. The Arctic climate became more severe and Euro-American whalers were beginning their decimation of northern whale populations. The Thule people left their settlements and developed a more nomadic life in their quest for more scattered animal resources - seal, walrus and caribou. Cultural change has accelerated over the last 100 years with the arrival of whalers, explorers, traders, missionaries, police, teachers, doctors and government representatives.

In the 30 years following the establishment of the Pangnirtung trading post by the Hudson's Bay Company in 1921 the Inuit population in Pang never exceeded 50 people. The Inuit continued to live in about 15 camps around the shores of Cumberland Sound. Between 1956 and 1966 the population of Pang tripled and it tripled again between 1966 and 1981. The community's rapid growth during the 1960s had a lot to do with a terrible disease which killed most of the sled dogs in the camps. Without dogs the people could not hunt and they were evacuated to the settlement. The governments of the day also encouraged movement to Pang so that better medical and educational services could be provided. Now only a handful of people still live at Kipisa on the other side of Cumberland Sound.

A WALKING TOUR OF PANGNIRTUNG

With this booklet in hand you can take a 2-3 hour walk through the hamlet. The route is a rough figure 8. The first loop takes you through the older part of town. points of interest are numbered on the map contained in this booklet. The walk begins at site # below Peyton Lodge.

HISTORIC WHALING STATION

The nineteenth century was a period of intensive whaling activity in Cumberland Sound. American and Scottish whalers arrived every summer to capture the bowhead whale, at first primarily for the oil rendered from blubber but increasingly for the plastic-like baleen used by the whales as a sieve for screening small marine animals for food. As time passed shore stations were established at Blacklead, Kekerten and Ussualuk. Inuit camps sprang up at these locations and the Inuit, in return for rifles, food,

wood and other items, quickly became responsible for manning the whale boats as well as processing the catch.

As the number of bowhead whales decreased, and as demand for oil and baleen declined after the turn of the century, the white whale, or beluga, became the quarry. One by one the whaling stations in the Sound closed down after being bought out and operated for a short time by the Hudson's Bay Company.

When the H.B.C. established a fur trading post at Pangnirtung much of the equipment from the stations was brought here during the 1920s to establish a small whaling station. The red and white H.B.C. buildings between Peyton Lodge and the water, site # are as they were during the whaling era at Pang, 1926-1963.

The white whales were towed to the shore and brought up from the water on a wooden cart which ran on rails up to the work platform. Here dozens of Inuit women would cut the blubber into small pieces which were taken to the main building at the head of the platform. The blubber was ground up in a large metal grinder and the "slurry" was pumped by hand through the wall of the building into large, square metal pots outside.

The square pots were not heated. The ground blubber separated by itself into grade one oil, used eventually for margarine and lard, and the scum was taken off and put in the round pots situated closer to the water. A fire was started and a two step heating and reheating process was used to separate the scum into grades two and three oil, which were used for soap. The final dregs were used as fuel to continue the heating cycle. You can still see vestiges of the blackened scum on the ground.

The skins were removed from the white whales. Originally they were packed in salt in barrels but after 1950 they were stored in large burlap bundles and stored to the west of the grinding shed. Every three years the narwhal population in the area increased and for a season half the processing would be of narwhal. The oil and skins were shipped to Montreal once a year.

Immediately behind the grinding shed is a small forge built in 1921. This is reputed to be the second oldest building in Pang.

PEYTON LODGE AND THE FIRST POST OFFICE

Adjacent to Peyton Lodge is what is now called the bunkhouse. It was built in 1968 by Peyton as a trading post. It didn't put The Bay out of business but movies were shown and Peyton ran a small workshop in the back - reloading empty ammunition shells. The building also served as the community's first post office. The bunkhouse is currently rented as accommodation for visitors.

The Lodge itself was built in the fall of 1970 and had its first season in 1971. The first tourist in Pang is reputed to be none other than one Pierre

Elliot Trudeau back in 1968, but 1971 marks the beginning of the tourism industry in Pangnirtung. Auyuittuq Park opened the following year.

The original Lodge has been expanded to the west with two-room additions built yearly after 1971. There are now 16 rooms with 32 beds. Over two dozen people are employed at the Lodge; most of them local residents. Accomodation at the Lodge includes three meals a day. For those not staying at the Lodge, meals, showers and laundry service can be purchased separately.

Peyton also runs a fishing camp at Clearwater Fiord which is at the north end of Cumberland Sound. Arrangements for a visit there can be made through the Lodge. The Community Host can give advice for a trip to a second fishing camp, the Tongait, on Kingnait Fiord.

On the walking tour of Pang feel free to drop into the lounge on the second floor of the Lodge. The coffee is free and so are tall tales of the Arctic. You should make a point of viewing Peyton's collection of historic whaling tools and photographs mounted on the lounge walls.

SEWING AND SCIENCE

The Misuvik Sewing Centre was moved to its current location, site #, in the fall of 1983. It operates as one of the five divisions of the Inuit Co-op. "Misuvik" means "place where people sew". The Centre is closed during the summer but the gloves, duffle socks, amoutiks and parkas made there can be purchased at the Co-op. About 8 people work at the Centre. Many of the items are sold in southern stores.

The two buildings beside the Centre have recently been joined together. Now in private hands, these two buildings served for many years as the headquarters of the R.C.M.P. detachment in Pang. There is an old jail in one of the buildings but its metal bars now imprison little more than a water tank. The building is said to be haunted and you may hear rumours of a mysterious incident which occurred in one of the upper rooms.

By the granite outcrop, site # , is a plaque commemorating the German Expedition to Clearwater Fiord in the First International Polar Year, 1882-83. During that year 12 scientific expeditions were sent to the Arctic and Antarctic to study meteorology and terrestrial magnetism.

An interesting account of the expedition has been published in The Beaver, autumn 1982 issue. As usual when Europeans came ashore in Cumberland Sound, the Inuit arrived on the scene in their kayaks within hours to trade fresh meat for tobacco and coffee. The Inuit astonished the German scientists by fitting together the numbered components of the pre-fabricated buildings and completing the construction of the site within days of the expedition's arrival. The expedition provided an unbroken record of scientific observations for 359 days.

[Consider reproducing a photo of the expedition site from The Beaver.]

The instruments used for observing magnetic variation were set up on octagonal concrete pillars cemented to square concrete blocks set into the ground. For many years some of these pillars and blocks have been used here in Pang as part of the foundations of the old R.C.M.P. jail; an example of the fine Arctic tradition of recycling building materials.

HOW IT ALL BEGAN

To the west of the German Expedition plaque are two red and white Hudson's Bay Company buildings at the head of a metal rail leading down to the water's edge. These two structures were erected in the mid-1930s. Both were used as the H.B.C. store at times, the one at site # was used primarily as a warehouse and the one at site # was used as the manager's house.

When the trade in whale products declined, the H.B.C. shifted its economic base in the north to the white fox fur trade. The H.B.C. which was then operating at sites in Cumberland Sound hired an Inuit hunter named Attagoyuk (the local school is named after him) to find a site for a new post from which the growing fur trade could be conducted. He chose this spot and called it "Pangnirtung" which means "place of many bull caribou". The first building was erected in 1921 where one of the metal H.B.C. warehouses now stands, site # . This building was later moved to site # beside the Co-op. More buildings were added to the post over the years. The H.B.C.'s establishment at Pangnitung was the largest in the Arctic until the mid-1950s when the post at Frobisher Bay surpassed it.

The first Inuk (singular of Inuit) to settle permanently at Pangnirtung was Jim Kilabuck who was a clerk with the H.B.C. in 1921 and continued working for the company for 44 years. He saw more than a dozen H.B.C. managers come and go over the years.

The Inuit brought furs and other products of the hunt to trade for a variety of goods. Money was not used until recently. H.B.C. tokens were used to keep track of a hunter's account. The H.B.C. historically has had a large impact on the Inuit way of life. Not only has its trading activities fostered dependance on manufactured goods and non-indigenous food but its presence has changed the technology and pattern of the hunt and has attracted the Inuit to settle near its posts.

A trolley was used on the metal rails to haul cargo from the H.B.C. sealift once a year. It was powered by a gasoline winch mounted on the concrete block which can still be seen a few feet from the rail. The large warehouses behind the old H.B.C. buildings are used to store goods from the current annual sealift.

The route passes by the present H.B.C. residences. In front of the manager's house is a small cannon from a trading or whaling ship. For many years New Year's Eve was celebrated in Pang by the firing of old socks from this cannon.

THE ROYAL CANADIAN MOUNTED POLICE

Most northern communities have a detachment of The Royal Canadian Mounted Police and Pangnirtung is no exception. The Pang force has two regular officers and one Inuit Special Constable. He has full police powers but in addition, provides local expertise and continuity as the regular officers usually serve for two years in the community and are then transferred.

The R.C.M.P. detachment was established in 1923, shortly after The Bay arrived. Site # is the location of the original R.C.M.P. building. That building was destroyed and replaced by two buildings nearby which were subsequently moved to their current location back at site # .

For most of the last 60 years the R.C.M.P. have been responsible for all government business. They have recorded births and deaths; delivered the mail; given relief to the destitute; and, as they say, occasionally performed police duties.

Beyond site # , as you look inland, the residences and office of the present R.C.M.P. establishment can be seen (office; site #).

Today the R.C.M.P. enforce all federal statutes, including, of course, the Criminal Code. As in olden times, however, the officers may be seen vaccinating dogs, giving driver's tests, helping put boats in the water and providing informal assistance with legal aid applications.

Other than the hamlet, the detachment's territorial jurisdiction covers Auyuittuq Park, the land around Cumberland Sound and the remaining Inuit camp by the Sound, Kipisa. The force's equipment consists of a truck, snowmobiles, boats and an aircraft on call from Frobisher Bay. Occasionally the R.C.M.P. act as Customs Officers for light planes entering Canada from Greenland or Iceland.

There are two Justices of the Peace in the hamlet, one Inuit and the other non-Inuit. They sit together every couple of months to deal with summary offences under municipal bylaws and territorial ordinances. Every two months the Territorial Magistrate flies into Pang with the Crown Attorney, a defence lawyer and a Court reporter. The Court handles criminal offences such as break and enter, narcotics and the possession of liquor, as well as the occasional civil matter. The Court is temporarily set up at either the Hamlet Office or the Community Hall. Appeals are taken to Yellowknife.

Continuing westward you will encounter a subdivision of duplexes which, but for their elevation above the ground and the presence of drying sealskins, could have been transplanted from the suburbs of any southern Canadian city. The duplexes, site # , were built during the late 1970s and stand in contrast to the earliest houses in Pang which were built of packing crate panels.

At one time the R.C.M.P. owned the large triangle of land on which the duplexes are located. Site # is where the R.C.M.P. launch "Lady Borden" was kept for many years. The R.C.M.P. visited the then numerous outpost camps by boat during the summer.

TELESAT, TENTS AND TELEPHONES

Past the duplexes is a fenced-in satellite dish, site # . This Telesat dish is in contact with the Anik satellite and provides radio and television service to the community. The hamlet receives one channel, the C.B.C. Frequently, you may see sealskins tied to the fence to dry.

The beach area beside the Telesat dish is very active during the summer, site # . Invariably there are canvas tents set up near the water and you can see people repairing boats or getting ready for a trip. Char and caribou may be hanging up to dry.

The community's telephone exchange is at site # . Most homes have telephones. If you call south you will notice a distinct time lag in the conversation because the telephone signal is bounced off the Anik satellite. The nearest telephone operators are in Ottawa. Every few weeks the red Bell Canada plane arrives in town and repairs and hook-ups are performed. The plane serves northern Quebec, Baffin, Keewatin and the high Arctic islands.

PARKS CANADA

Toward the west end of town overlooking a small bay where many boats are kept during the summer, is the white, futuristic Parks Canada building, site # .

About 500 people a year pass through Pang on their way to stay at least one night in Auyuittuq National Park. Up to four times that number visit the Park Office in Pang to examine the display room, view movies or slideshows, browse through literature or to seek the advice of the Park staff on hiking gear or weather conditions in the Park. The Office is open all year but in July and August it is usually open in the evenings and on weekends in addition to regular office hours. If the Community Host is not available the Park staff will assist a visitor with obtaining outfitting services.

Parks Canada provides year-round employment for about 8 people. Other than the Superintendant and the Chief Warden there are wardens, maintenance and office personnel. Several more employees are added to the staff during the summer. As well, several local people perform work on a contract basis in the Park. They maintain trails, build wire bridges, remove waste and repair the emergency shelters. Through employment, contract labour and the purchase of local supplies and services, Parks Canada is a significant economic factor in the hamlet. Its yearly budget, exclusive of research contracts, is second only to that of the hamlet itself.

The Park was created in 1972 and Pangnirtung is the primary access point for the many hikers, mountain climbers, photographers, naturalists and scientists who visit. Visitors to Pang are encouraged to take at least a day-trip to the head of the fiord which is the entrance to the Park. Transportation can be arranged through the Community Host.

THE HUNTERS & TRAPPERS ASSOCIATION

If you follow the road on which the Park Office is located, you will see a cluster of buildings at the end. The elevated building at site # serves as the residence of the Fish and Wildlife officer. The building's appearance is deceptive. It is a concealed log cabin which used to be the home of the last permanent doctor in Pang. He was associated with St. Luke's Hospital. Needless to say, the log cabin was difficult to heat and it was damaged in the terrible windstorm of 1976.

The buildings at sites # and are used by Fish and Wildlife and the Hunters and Trappers Association resectively. Their physical proximity reflects their close working relationship. The Hunters and Trappers Association was formed by the local residents to promote efficiency within the hunting and trapping community. The Association has input into all matters regarding the regulation of hunting and trapping activities, particularly quotas. It is usually consulted when issues involving land use outside the hamlet arise. Members assist with biological research in the area and maintain an informal rescue system through a short-range radio network.

The H.T.A. operates a small Trading Post which supplies hunting, trapping and fishing equipment to its members. Occasionally food items such as muktuk, the skin of the white whale, are offerred for sale.

A trail marked with inukshuks (stone cairns) begins at site # and extends for a 2-3 hour walking distance to a traditional Inuit summer camp. Visits to the camp are by appointment only - through the Community Host.

COMMUNITY HALL

Back-tracking to the Parks Canada office and continuing along the main road to the east, you will find a low-lying building at site # which is the Community Hall. It is the focal point for weekly dances, bingo, community meetings, celebrations and special events. On occasion it serves as a courthouse. A new community complex is being planned.

PIZZA, POOL & SNOWMOBILES

A cluster of buildings nearby seems anonymous but conceals a variety of activities. A privately run snowmobile repair shop is at site # . Pang Pizza (yes...Pangnirtung has a pizza parlour) is at site # . It provides fast food and cigarettes as well as a video cassette rental service. A pool hall is at site # . We ask that the artisans in the building at site # , where carving and wood-working takes place, not be disturbed.

One of the original H.B.C. buildings is at site # . This was built by the H.B.C. as a residence for Jim Kilabuck, the company's first employee in Pang.

THE HUDSON'S BAY COMPANY

Heading back towards the waterfront, you cannot miss one of the largest buildings in town, site # . We have already discussed the role the H.B.C. played in the establishment of Pang. Today The Bay runs a department store and supermarket under the same roof. The Bay's current premises were built in 1976 after a severe windstorm blew apart the old store. There are many stories people in town tell of that windstorm. Boots from the destroyed store were found 100 km away on the other side of Cumberland Sound, deposited there by 200 km/hour winds.

At the end of summer The Bay ship brings a sealift of food and drygoods to Pang. Between 400 and 500 tons of material is unloaded at high tide over the course of 4 or 5 days by several barges. The material is stored in the numerous warehouses between the store and the water. Many grocery items and some drygoods are airlifted into Pang weekly throughout the year at considerable cost.

The Bay purchases soapstone and ivory carvings, narwhal tusks and furs from local residents. This continues the H.B.C.'s historic role in the Arctic. Handicrafts and furs cannot be purchased at The Bay as all are sent south. The Inuit Co-op is the primary retail outlet for these items in the hamlet.

Only a handful of polar bear skins are brought to The Bay each year. The harvest of wolf skins may be 10-20 a year with arctic fox being ten times that number. The market for sealskins has been drastically reduced due to the seal hunt controversy in the south. A harp seal skin which several years ago may have brought an Inuit hunter \$60 now is worth just over \$20. Nevertheless, at the end of July about 100-200 harp seal skins are sold to The Bay most mornings of the week.

The Bay is the fourth largest employer in the hamlet with between 17 to 20 Inuit employees and 3 nonInuit. There are also about 200 temporary man-days of employment at the time of the annual sealift.

THE NURSING STATION

Beside The Bay is a large building which hopefully the visitor will not have to visit. The nursing station, site # , houses the community's three nurses. It also has 4 patient beds, examining rooms, X-ray equipment and laboratory facilities for routine medical tests. With the help of several assistants, the nursing station operates 24 hours a day in the case of emergencies and conducts a variety of weekly clinics to provide public health education.

A doctor visits from Frobisher Bay every 6 weeks and on occasion a specialist will pay a call to the community. Serious matters are referred to Frobisher Bay or Montreal. Once a month or so a special medi-vac airflight will take out an emergency case. A dental hygienist has a year-round office in the local school which has facilities for filling cavities and providing dental hygiene education.

THE ANGLICAN MISSION

There are many of the distinctive grey and yellow buildings of the Anglican mission scattered through the centre of town. The church is located at site # . A second church is at site # but this suffered a fire during the winter of 1982-83. The times for services in English and Inuktitut are posted by the door.

The Rev. E.J. Peck, who is credited with adapting a syllabic method of writing to the Inuktitut language, established an Anglican mission at the whaling station at Blacklead Island on the southwest side of Cumberland Sound in 1894. A small shack was erected for the mission's medical work. With the decline of the whaling industry in the Sound, the mission was closed and moved to Pangnitung in 1926.

ST. LUKE'S HOSPITAL

The first doctor in the area, Dr. Leslie Livingstone, arrived in Pang and spent the winter of 1926 travelling over 3400 km to the numerous Inuit camps. The celebrated ivory-carver, Etooangat, was Livingstone's guide and some of his recollections have been published and may be available at the Co-op.

The Canadian Government refused to establish a medical centre in Pangnirtung, which Dr. Livingstone urged, and so on the initiative of the Anglican Church, St Luke's Hospital was established in 1930. Dr. Livingstone served as the resident doctor from 1931 to 1933. The original hospital was substantially enlarged four times between 1939 and 1967.

The building complex at site # includes the original hospital, a portion of which is now a museum. Until just after WWII St. Luke's was the only hospital on Baffin Island. It was not until 1972 that medical facilities had so developed in Frobisher Bay that the hospital closed. Much of the hospital's work over the middle part of this century was with the many tuberculosis victims in the area. The Inuit lacked natural immunity to this alien disease. There were many deaths in the community and families were split when patients were sent to thee south for prolonged treatment.

ARTHUR TURNER TRAINING SCHOOL

The predominant use of most of the building complex at site # is now for the training of clergy for the Anglican ministry. The Arthur Turner Training School, named after Canon H.A. Turner, who served in the area for 20 years, was established in 1969 by the Rev. Canon M.G. Gardener.

The Church hall was used at first but when St. Luke's Hospital closed in 1972 the School moved to its present quarters.

Visitors are welcome to visit the School during the summer when the students are on holiday to view a small exhibit and to see the chapel and library. With luck you might catch the School Principal working in the greenhouse and the effects of 24 hour sunlight on lettuce can be examined.

The School has 3 to 4 students at a time. There are over a dozen Inuit ministers in the Diocese of the Arctic which includes the N.W.T. and Arctic Quebec.

Perhaps the largest dwelling in Pang is the residence of the hamlet's current minister, site # . Church activities are varied and include women's and teenager's groups, singing, study groups, outings, picnics and crafts. The Anglican mission became a self-supporting parish in 1977.

Culturally, Christianity has gone far in replacing the traditional Inuit shamanism. The shaman or "angakok" was a member of the community who had special powers enabling him to draw on the spirit world. The shaman not only had extraordinary strength but he served as a focal point of cultural wisdom. For example, a typical admonition of the shaman was that the people should not catch the first run of arctic char going down the rivers in the spring because this group of fish was led by the largest and wisest char who, if captured, would not be able to lead the fish back up the river later in the season. Regardless of one's religious beliefs the conservationist wisdom of this advice is obvious.

MUSEUM - THE SAIPALASIIKUT SOCIETY

As mentioned there is a small museum at the west end of the old St. Luke's Hospital, site # . An antique handmade snowmobile is parked by the entrance. The museum is run on a shoestring budget (supported primarily by bingos) by the community elders. They are organized as The Saipalasiikut Society. The name means "an old person who dies of natural causes".

The museum contains examples of traditional hunting tools, a kayak, sealkin clothing and household implements. The elders meet regularly at the museum to talk about old times and to practice traditional skills which are in danger of being replaced by adroitness at video games. While there is no admission fee per se the visitor's attention is drawn to the donation box by the door.

POST OFFICE

The post office is in a large building which also houses the hamlet's firetruck and the local radio station, site # .

The post office is municipally administered under contract with Canada Post. Mail comes and goes several times a week with the flow of air traffic. The post office is open 5 days a week and it is also open 6-8 pm Friday evenings.

For decades after the establishment of the Hudson's Bay post the only mail service was the travelling postmaster aboard the H.B.C. supply ship, which was of course once a year postal delivery.

Twenty years ago the armed forces would mount what was called "Operation Santa Claus" and at the full moon at Christmas would parachute mail into the community. Imagine the local residents gathering on the moonlit snowscape to open mailbags representing one of the few physical contacts they would have with the outside world during the long dark winter.

FIRE STATION

A modern firetruck arrived in Pang on the sealift of 1981 and it is housed in the same building as the post office. There are over 20 volunteer firemen in the hamlet. Unlike southern towns there are no fire hydrants here. They would freeze and crack. The firetruck has a 1000 gallon tank built into it. The hamlet's two water trucks are parked with full tanks in a heated garage at night. When a fire occurs, which is rare, the firetruck provides the first squirt, after which the two water trucks, whose drivers are members of the fire brigade, set up a quick shuttle of water to the firetruck.

RADIO PANGNIRTUNG

The local radio station is in the same building as the post office. C.B.C. radio is received via the Telesat dish and is rebroadcast at a range of 40-70 km depending on the intervening mountains. There is therefore reception at the camps in the Cumberland Sound area. Daytime and late evening content is general C.B.C. programming but in the late afternoons and evenings airtime is devoted to community news, messages and local talk shows.

HOUSING

The majority of Pang residents live in houses rented from the Housing Association, a local organization governed by an elected Board of Directors. The Housing Association offices are at site # . The houses are built and owned by the Housing Corporation, a government corporation with its head office in Yellowknife. The Housing Association allocates houses according to need, collects rent based on income and takes care of general repairs.

The territorial government owns about a dozen houses reserved for teachers and other employees. The federal government owns almost as many for its R.C.M.P. and Parks Canada employees. The hamlet, the

Anglican Church and the H.B.C. own another half dozen. The number of privately owned houses can be counted on less than the fingers of one hand.

THOSE AREN'T TRAMPOLINES

One doesn't have to go far to see numerous skins stretched out to dry on wooden frames or on convenient fences such as along the airstrip. Before the arrival of imported wood in the Arctic, skins were traditionally pegged down on the tundra to dry. The small speckled skins are ring seal. The ones with large black kidney-shaped markings are harp seal.

An economy based almost exclusively on hunting is a rarity among the peoples of the world. With the exception of gathering edible plants and berries for snacks, the Inuit have been hunters for thousands of years. From this central fact most other cultural attributes of the Inuit flow. The local economy is increasingly a mixed one. Nevertheless, the proliferation of sealskins during the summer attests to the continuing importance of marine mammals as a source of fresh food.

There used to be more sealskins drying. The value of sealskins has been drastically reduced in recent years, not because of any shortage of seals, but because of the controversy over the St. Lawrence seal hunt and the resultant European ban on importing seal products. Before the ban the money obtained from the skins offset the cost of gasoline and ammunition used in the hunt for food. This is no longer the case. The ban has had a deleterious effect on the cost of obtaining one of the few independant food sources the Arctic has to offer its people.

It is easy to say that the local effect of the ban was the result of thoughtlessness on the part of otherwise well-meaning southern activists. But Pangnirtung, along with other northern communities, sent representatives to the European Economic Community while the issue was being discussed. They could not compete with the media barrage generated by the proponents of a ban on seal products. The Inuit point of view is that there is no real difference between cattle and seals except they have to work a little harder to get their seals. And why be forced to pay a small fortune for frozen hamburger from the south when they can eat fresh seal? So if you own a Greenpeace T-shirt, do not wear it on your walking tour of Pang. This is still a hunting community.

THE COFFEESHOP

The coffeeshop is one of the few businesses in the hamlet locally owned and operated, site # . It is open afternoons and evenings. Coffee and some fast foods are available. There is a jukebox and a number of video games. The coffeeshop is a meeting place for the younger people in town.

THE OLDEST BUILDING IN PANG

Between the coffeeshop and the Inuit Co-op is the by now familiar red and white of an early Hudson's Bay Company building, site # . This was built in 1921. It served as a store, manager's residence and, as well, there was a small space reserved for a missionary. All at the same time. The building is now owned by the Co-op and it is used as a warehouse.

DOGS, DOGS, DOGS

From ancient times the dog has been a central feature of the traditional Inuit way of life. Until the advent of the snowmobile a couple of decades ago teams of dogs provided transportation by komotiq or sled for most of the year. Provision of food for the team and maintenance of associated gear took up a good portion of the daily cycle.

It was a disastrous epidemic among the dogs of the outpost camps which precipitated the emergency air-lifts of families into Pang during the early 1960s, thus accelerating the community's growth.

Do not be alarmed to see the dog control officer striding through town with his rifle. Pang does not suffer from the often dangerous packs of dogs which many other northern communities are plagued with. One wonders what the hamlet dogs think of their recent decline in status from vital mode of transportation to household pet.

THE INUIT CO-OP

The Co-op, at site # , is owned and operated by its over 300 members, most of whom are resident Inuit. It is overseen by 8 directors who meet monthly. About 20 people are employed in 5 divisions.

The retail division deals in hardware, drygoods and groceries. The Pang Co-op acts in concert with the co-operatives of other northern communities to organize a sealift separate from that run by The Bay. Most groceries arrive weekly by air.

The Print Shop runs from October to May and has been in operation for ten years. About 30 locally designed proofs are made each year with a 50 print run of each. Prices range from \$60 to over \$300. Prints are on display in a catalogue located in the main store. All proofs are approved by the Canadian Eskimo Art Council in Ottawa.

The carving division buys from approximately 40 soapstone, bone and ivory carvers in town. The market for carvings is very sensitive to economic conditions in the south. There have been recurring shortages of soapstone as the latter is not mined locally.

The Misuvik Sewing Centre is a division of the Co-op and the Centre's products are on display at the Co-op. The oil and gas division of the Co-op operates under contract with the government of the N.W.T. and runs

the local gas station near the oil tanks, site # . The Co-op also acts as an agent for Bell Canada in collecting phone payments. As the nearest chartered bank is in Frobisher Bay it performs limited quasi-banking functions with residents, "credit on account". The Co-op buys furs: polar bear, arctic wolf and fox as well as narwhal tusks.

The Co-op is a meeting place during the day. It is always crowded during the 10 am and 3 pm coffee breaks.

THE WEAVE SHOP

The Pangnirtung Weave Shop is open all year although little work is done during July and August. During the week the visitor is welcome to drop in at the sales area of the building where hand-crafted rugs, tapestries, dolls, akujuliks (parkas), amautiks (parkas with a baby pouch), blankets and a variety of smaller items such as hats, scarves, zipper-pulls and bookmarks may be purchased or ordered.

The Weave Shop has been in operation since 1969 and over the years its tapestries and rugs have sold as limited edition art objects and have received wide acclaim in the North American market.

Almost 50% of sales are from the tapestries. The Weave Shop buys designs from about ten local artists. The designs are then adapted to tapestry work. The work is done on the 15 looms in the Weave Shop building. The larger tapestries are exhibited at half a dozen shows in the south every year and are sold through art galleries. Prices range from \$2000 to \$3000 for these tapestries which may take a month to weave. They are not normally sold here in Pang although they may be ordered.

Many smaller tapestries are sold only in the hamlet as "Pang exclusives". These sell in the price range of \$150 to over \$500. There are about 15 different Pang exclusive designs which are in editions of 10 or 20. The Weave Shop will do one-of-a-kind works if ordered but of course this may double the price.

A large woven rug may cost several thousand dollars as it takes about two months to weave. The dolls have woven bodies with hand sewn clothes and range from \$150 to \$200 in price.

The Weave Shop has over 15 women weavers. Approximately 20 other women work in their homes crocheting hats, knitting sweaters and sewing. Both sales and staff have doubled over the last few years but the current premises are at their physical capacity.

THE SECOND LOOP

The second loop of the tour of Pangnirtung will take you through the more recently developed part of town. An aerial view would show the community bisected by the airstrip. Residential development is scheduled for the "upper" side of the hamlet.

Beside the Tourism Centre there is a low-lying white building which is the community freezer, site # . This is operated by the Co-op and it is used primarily to store arctic char (which can be purchased at the Co-op) and occasionally muktuk.

Past the main beach is the community cemetery, site # . Nukiguak, one of the first R.C.M.P. Special Constables, who died in 1949, is buried there, as is Canon Turner. The traditional Inuit form of burial was a rock cairn at the base of a boulder. One can appreciate the exigencies of the permafrost.

Adjacent to the cemetery is the community baseball diamond, completed in 1983.

EDUCATION - YOUNG AND OLD

The largest building in Pang is Attagoyuk School, site # , which provides classes for over 300 children. Instruction is offerred from Kindergarden to grade 10. Teenagers board in Frobisher Bay to complete grades 11 and 12.

The school was built in 1962. It is named after the Inuk engaged by the H.B.C. to find a site for its trading post in 1921. It was not until 1956 that the federal government sent its first teacher to Pang. Up until that date education was undertaken by the Anglican mission.

There are currently about 15 non-Inuit teachers and 4 Inuit instructors. Of the latter, two give instruction in hunting and other life skills on the land and two provide lessons in traditional sewing, games and other aspects of Inuit culture. There are library, gym, home economics and industrial arts facilities in the school. A wide variety of sports programmes are run at the school in the evenings. The building also houses the office of the local cadet unit.

There is a resident adult educator in the hamlet who runs the adult education programme from the portable classroom buildings behind the school, site # . Close to 300 students a year are in the programme which runs from September to April. It is open to those over 16 years of age who have been out of school for two years. Its focus is on upgrading regular academic skills as well as providing instruction in traditional subjects. There are regular classes, workshops, field trips as well as radio lectures (a recent topic being "tax for the trapper").

THE HAMLET OFFICE

Heading down the road toward the airport you will see the Hamlet Office at site # . Self-governing hamlet status was granted to the community in 1972. There are 8 people on the Municipal Council with Councillors and the Mayor serving two year terms. The day to day activities of the municipality are handled by the Secretary-Manager, Assistant Secretary-Manager and the Hamlet Foreman. The latter oversees about 20

permanent employees engaged in water delivery, sewage and garbage removal, road repair, airport maintenance and the operation of the post office and the hamlet garage. The number of workers may triple on a temporary basis especially in the summer when special projects may be underway.

As you might expect with a relatively homogeneous community, local politics are more consensual in nature than adversarial. There are dozens of Council sub-committees covering such areas of concern as education, housing, roads, recreation and tourism. During the day you can visit the council chambers within the Hamlet Office building. Incidentally, the building used to function as a hostel and during the early years of hamlet status the Council met in the room where the post office is now, site #

AIRPORT AND VICINITY

The airstrip was built in the late 1960s by the armed forces. Prior to that time Peyton operated a makeshift airstrip on the tundra for light planes. During the winter DC-3s would land on the frozen fiord. The airstrip is about 3700 m long (check this) and can handle DC-3s, 748s, Dash 7s and Twin Otters. There are several scheduled flights a week and a number of freight flights. Numerous military, police, H.B.C, Bell Canada and various government-chartered planes appear from time to time.

Near the airport is the hamlet garage and a number of warehouses. The Northern Canada Power Commission operates a 3-generator power plant at site # . The operation includes a back-up generator as you can imagine the effects of a sustained power failure in the midst of winter. Furnaces go out when the power goes off, and there isn't a convenient forest nearby for the fireplace.

GOVERNMENT SERVICES

The government of the N.W.T. office building is at site # . Compared to the rest of Canada, the N.W.T. has a peculiar constitutional status as it does not have the inherent jurisdiction that the provinces have. Because of this there has been a relatively heavy federal presence in the north. However, other than the establishment of R.C.M.P. posts in the Arctic, the federal government neglected the Arctic for decades. It did not send a Northern Service Officer to Pang until 1962. His arrival relieved the R.C.M.P. of many of their non-police duties. In 1970 jurisdiction for many government services was delegated to the emerging territorial government by Ottawa. The major activities of the G.N.W.T. in Pang are engineering, social development, education and economic development. Residents come to the G.N.W.T. offices for such matters as welfare, parole reporting, various licence applications, business development advice and job notices.

WINDS, WIRES, FENCES AND POSTS

By now you will have seen a variety of buildings in Pang. How are homes built in a land where winds of over 200 km/hour may blow during the winter and where the presence of permafrost means that heat conducting foundations commonly used in the south will cause a building to melt into the ground?

The high cliffs which define a fiord tend to funnel winds until they reach gale velocity. You won't see many tall buildings in town. You may have already noticed that most homes are wired to the ground. The storm of 1976 lifted houses right off their foundations. We will have to see if the wires hold when the next terrible wind arrives.

With the exception of The Bay, the R.C.M.P. and the Anglican Church premises (which are exceptions for historical reasons), almost all land in Pang is not privately owned. You will not see freehold land in the surrounding area either. Private ownership of land is a concept alien to Inuit culture. One effect of this trait is that there are no fences around the houses. People are perfectly free to walk between houses. A visitor will not find the suburban barricades of the south here.

Unless built on rock, and Pang is situated in an area of glacial debris of sand and gravel, stone or concrete foundations will conduct heat from a building and melt the permafrost, destabilizing the entire structure.

Thus, buildings in the hamlet are constructed on wooden or steel posts which either conduct heat poorly or radiate heat into the air before it reaches the ground.

UKAMA TRAIL

Take note of the road leading up toward the Duval River valley as the Ukama Trail begins at the end of the road, site # . A brochure is available for this 2-3 hour walk.

THE WATER RESERVOIR

Despite the fact that there is water everywhere, the community has been plagued with water shortages during the winter. During the summer water is pumped directly from the Duval River and delivered to the houses by truck. In the past winter supplies have been obtained from springs at the foot of Mount Duval and occasionally trucks have crossed the frozen fiord to the Koolik River valley. The groundwater sources, or "taliks", are not very reliable. In 1967-68 a 1400000 gallon reservoir was built at site # . For years there have been problems with leakage and silt. Its storage capability has been less than satisfactory. The reservoir was built for a community of 1200 and plans are in the works for a new one near Mount Duval.

THE BRIDGE

In 1983 the Commissioner of the N.W.T. officially opened the new bridge over the Duval River, site # . The bridge is important as future residential development is planned for the area on the other side of the river. In 198? the territorial campground was moved from the beginning of the Ukama Trail to site # across the river. Currently the bridge road leads to the garbage dump, sewage disposal site and the incinerator. Garbage is picked up from each house and dumped in a pit at the far end Sewage is aerated over the tundra and treated with of the road. chlorinated lime. You may have seen the "pump-out truck" picking up sewage from the houses. (Different trucks are used for water delivery). The incinerator by the dump will be operating shortly. Its operation was delayed as there was insufficient draft for the furnace. A high chimney could not be built due to the high winds in the area. The community is dependant on its truck system for water and sewage due to pipeline construction problems in the permafrost.

IKUVIK TRAIL

On the other side of the river the Ikuvik Trail begins; a 4-5 hour hike to the top of Mount Duval. A brochure is available.

THE BEACH ROAD

Turn now and follow the river down to the beach road along the fiord. At site # there is an old unmarked cemetery with at least a dozen unmarked graves. Little is known about this cemetery. Most of the community's sand and gravel requirements are met by the quarry located on the inland side of the road, site # . Actually there is a shortage of naturally occurring gravel of the apropriate size for road construction. A lot of fill is needed to elevate roads and building foundations above the water-retaining tundra.

The hamlet's oil and gas needs are met by an annual oil sealift. In the fall a tanker arrives in the fiord and for a couple of days a hose is run to the tanks at site # and a year's supply of fuel is delivered. What if it didn't come one year?

If you are in Pang towards the end of August you may see the G.N.W.T. freighter unloading the annual sealift. Barges bring the goods ashore and tractors deliver them around town. During the summer the beach, site #, is often the scene of great activity, particularly at high tide. Although no one has counted there are at least 100 of the standard 22 foot freighter-canoes operated out of Pang. They are essential for seal hunting and for reaching the caribou grounds at the northern end of Cumberland Sound. As well, entire families head out by boat for extended trips in the summer months to innumerable camp-sites along the Sound's coast.

There are over a dozen licenced outfitters who will take a visitor to a variety of destinations accessible only by water. As mentioned, these trips can be arranged through the Community Host at the Tourism Centre ... where the last leg of the walking tour of Pangnirtung leads.

Illustrations Recommended for the Pangnirtung Brochure

The number of photographs used to illustrate the Pangnirtung brochure will depend to a great extent on how much money will be available. The text is lengthy and deserves a lot of pictures. If the text is edited and its length reduced or if it is decided not to sell the brochure then fewer pictures are appropriate. For the current text the following would be appropriate:

- (1) an elevated or aerial view of the hamlet
- (2) the HBC whaling station as it is today
- (3) whale blubber processing when the station was operating
- (4) the bunkhouse as the first Post office
- (5) Peyton Lodge
- (6) an historical picture of the site of the German Expedition of 1882-83
- (7) an historical picture of sealift in front of the old HBC buildings at the head of the rail
- (8) the first RCMP building being constructed in 1923
- (9) the "Lady Borden"
- (10) the duplexes and the Telesat dish
- (11) Parks Canada office
- (12) a contemporary seal-hunting scene
- (13) Pang Pizza
- (14) Jim Kilabuck's HBC building
- (15) several Canada Day celebration pictures; eg: bannock making contest or harpoon throwing outside current Bay store
- (16) the church
- (17) Principal of Arthur Turner Training School in greenhouse
- (18) elders outside Museum
- (19) firetruck outside firehall
- (20) clerk in Post Office
- (21) sealskins on racks
- (22) the Co-op building beside oldest HBC building
- (23) a carver at work
- (24) the Weave Shop building and picture of weavers or a tapestry
- (25) the cemetery at a distance or a baseball game in progress

- (26) a group of students studying, especially if a traditional course
- (27) hamlet office building or mechanic in hamlet garage or, if possible, Hamlet Council in session
- (28) closeup of building foundations or "wind-wires"
- (29) the bridge under construction
- (30) water truck filling up at Duval River or pump-out truck at house
- (31) vehicle at Co-op gas station with oil tanks in background
- (32) sealift scene at beach
- (33) hikers getting into out-fitter's boat at main beach
- (34) Community Host in office with visitors.

PART IV NUVOATIAKALLA TRADITIONAL INUIT SUMMER CAMP

The objectives for the development of a traditional Inuit summer camp for tourists were:

- (a) select an appropriate site at "Kingardjuak";
- (b) build a trail to the site; and
- (c) plan the development of the site.

Fieldwork

(1) Site Selection

An appropriate site was found at Nuvoatiakalla, which means "place where there is a sharp point". The site is about two thirds of the way to Kingardjuak from Pangnirtung. The MMM study recommended that the summer camp be built at "Kingarduak". From the map contained in the study it was clear that the intended area was Upajanna. The three name places are located in Fig. 8.

The Upajanna site was not chosen for two reasons: (a) it was too far away; and (b) the trail to the site would have passed through an area currently used as a summer camp by some residents of Pangnirtung. The matter was discussed at two meetings of the Tourism Committee during the summer and it was agreed that the Nuvoatiakalla site would be better suited. It is a 2-3 hour walk to Nuvoatiakalla. It would have been a 5-6 hour walk to the site recommended by the MMM study.

The chosen site is sheltered by high cliffs, has a fresh water supply, has several good landing points for boats and it possesses sufficient flat, dry space for the construction of a camp. Fig. 9 indicates a space suitable for the location of a sealskin tent. Fig. 10 is a view from an elevated point and shows a sheltered landing point. Fig. 11 is reproduced from an aerial photograph. It was taken at low tide.

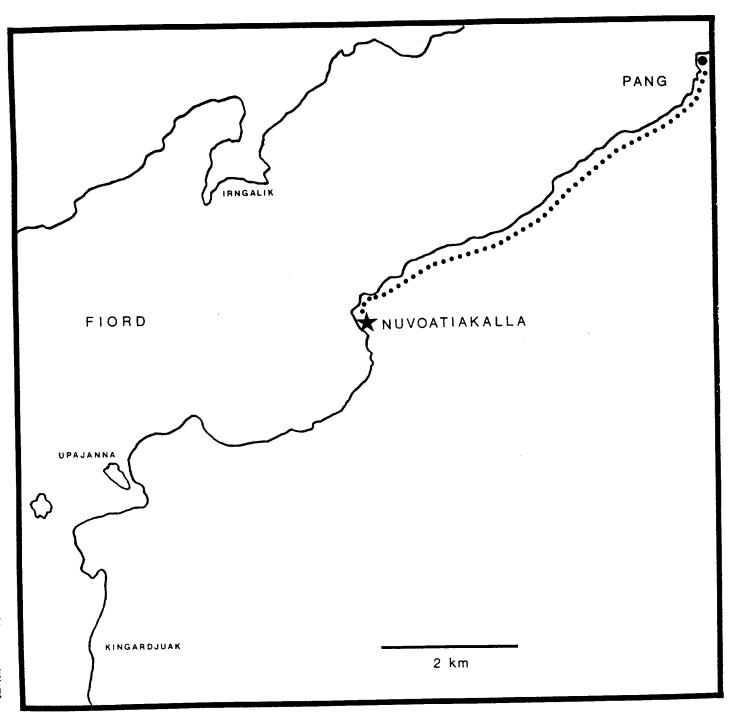


Fig. 8. Location of Nuvoatiakalla, Upajanna and Kingardjuak.

* •

.

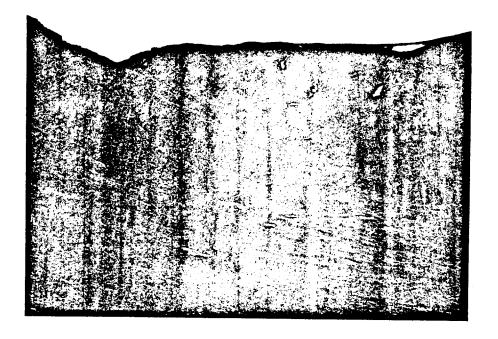


Fig. 9. The Nuvoatiakalla site. The location of a space for the sealskin tent is noted by the person in the photograph.

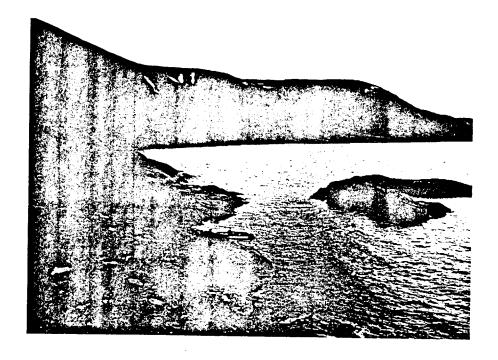


Fig. 10. Boat landing point at Nuvoatiakalla. The offshore rock provides shelter from wind and waves.

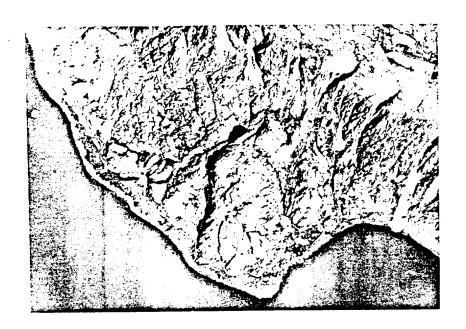


Fig. 11. Summer camp site showing topography. Enlarged from an aerial photograph.

The site is aesthetically pleasing as there are several waterfalls on the surrounding cliffs and there is a good view of the mouth of Pangnirtung Fiord. The summer camp is in a secluded location and the visitor hiking to the camp will not see it at a distance but will come across it suddenly as he or she passes through a rock cut.

(2) Trail Construction

During August of 1983 the trail crew built approximately 30 inukshuks from the west end of the hamlet to the Nuvoatiakalla site, Fig. 12.

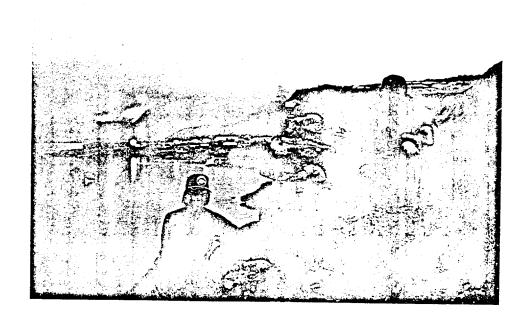


Fig. 12. Inukshuk on Nuvoatiakalla Trail with two members of the 1983 trail crew.

The trail will take most visitors about 2-1/2 hours to complete. There are parts which are difficult. There are several places where the hiker must carefully manouever through fields of broken, loose stone. In some places the tundra is calf-deep and very wet. Toward the Nuvoatiakalla end of the trail the land slopes sharply to the water and the path is narrow with difficult footing. For an older visitor or one not in good physical condition, an option might be to take a boat to the site. Fig. 13 is reproduced from an aerial GSC photograph.

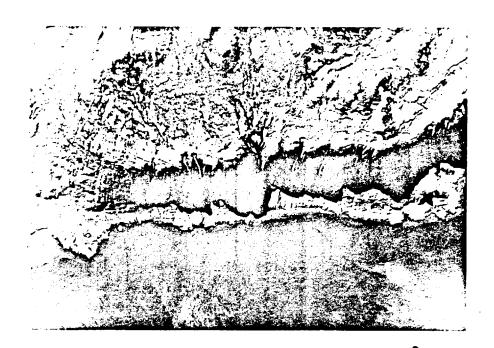


Fig. 13. Aerial view of the Nuvoatiakalla Trail. The camp site is at the far right of the photograph and Pangnirtung is at the far left. The trail follows the shore about 50 m. inland.

What is a Traditional Summer Camp?

On July 15, 1983 twelve members of the Saipalasiikut Society were interviewed at the Museum in Pangnirtung. Few of the elders had spent their early years in the vicinity of Pangnirtung. Most had grown up at camps further south down Cumberland Sound. Some came from Kekerten or Omanajuak. Most of the following descriptive material comes from these individuals. Their names are listed below. A group photograph was taken.

Korgak Akulukjuk Malaya Akulukjuk Towkie Maniapik Pauloosie Qappik Sauluq Shukulaq Annie Alivaktuk Martha Kakee Oleepeeka Iqalukjuak Koodlu Pitsiulak Arnakalak Kakkee Kunugusiq Nuvaqiq Maggie Etuangat

Aksayok Etooangat and Simon Shaimaiyuk were not present.

A summer camp today is not like it was 40 or 50 years ago as the elders remember. Today many residents of Pangnirtung go for a weekend or for several weeks during the months of July and August to sites along Cumberland Sound. Camping today is for specific purposes such as hunting or fishing. Recreation is a secondary purpose. Families go to different sites depending on the purpose of the trip. The technology of hunting and fishing, the food eaten and the clothes worn at a summer camp are of course different today.

In the old days people were in large groups during the winter. A number of families would live near each other. In the spring, about April, families spread out over the land to camp and hunt for the young, spring seals. As dog teams were used for transportation people went out to camp, hunted, and returned to the winter sites before the ice broke up. Unlike today, a "summer camp" was really a "spring camp".

Upon the return from "spring camping" the people would set up sealskin tents beside the winter dwellings and would, in a sense, camp out for the summer.

To create a summer camp for tourists to visit during July and August, a camp would have to resemble the camp at the winter site during the summer and not the "spring camp". Many of the details would be the same. There would be a kamotiq nearby whether a "spring" or a "summer" camp was visited, although the kamotiq would not be used at the "summer" camp.

An interesting question is whether a winter dwelling should be constructed at the site for authenticity. This would be a "kamek" as opposed to the "tupek", or summer tent.

There may be a great deal of variability in what was done. Etooangat, while touring the Kekerten site, indicated that some dwellings were used in both winter and summer. In late fall, a thick layer of moss was put over the sealskin tent and a second layer of skins was placed on top.

However, it is not clear how widespread that practice was. The elders of the Saipalasiikut Society indicated that the floor of the winter dwelling unfroze in the

summer, was muddy, and that the winter homes had to air out during the summer. A simple sealskin tent was a much more pleasant place to spend the summer.

It would be more educational and enjoyable for the visitor, as well as more authentic, if the winter dwelling was constructed. A winter dwelling was similar to the summer dwelling in some respects. For example, it did have a sealskin covering and looked somewhat like a tent. It differed in that the frame was more square and was sturdier. As well the centre of the living space was excavated and a low turf wall ran around the perimeter of the structure. There were well-constructed eating and sleeping platforms. Good examples can be seen at Kekerten. There were no platforms in the summer tents.

What do we mean by a "traditional" summer camp? A summer camp 200-300 years ago, before the goods and technology of the whalers and traders became available is one alternative. A second alternative would be a camp which showed some evidence of contact with the qallunaat but before dog teams were replaced by skidoos, boat motors became available and before wage employment at permanent qallunaat-inspired settlements became common. The latter alternative would represent a camp in the 1920's and 30's. Rifles and metal implements were common in a summer camp at that time. Wood as a building material would increasingly have been used. The second alternative would be preferable as the 1920's and 30's are within the memory of current members of the Saipalasiikut Society and there is a definite paucity of written descriptions of summer camps of the 18th and 19th in the vicinity of Pangnirtung. Moreover, the increasing impact of qallunaat technology on the traditional Inuit way of life is an interesting topic in itself. A question like "what did you use before wood frames were available for drying skins?" could be answered by showing how skins were pegged to the ground. On being asked "what did you use before steel knives?", a visitor could be shown a caribou antler knife.

(a) A Tent

A traditional summer camp had one sealskin tent per family and as a camp could be composed of one family, one tent would be sufficient. The tent was made of ring seal skins. The blubber was scraped off and dried. The skins were as large as possible. They were cut differently from skins sold today as every piece of skin was left on and holes or slits were sewn up. The skins were sewn together with relatively thick threads of sealskin.

In the very old days, before the time of those in the Saipalasiikut Society, the frame of the tent was made almost entirely of whalebone. Over the years the use of driftwood and imported wood increased. There would be only one entrance, made of a seal skin flap, not wood. There were no windows, unlike the winter huts which had windows made of about 10 stretched bearded seal intestines sewn together. The tent had no interior partitions. There were no interior platforms or rugs either.

Figs. 14, 15 and 16 are examples of Inuit tupeks in the area. Further examples from the 1920's of both tupeks and kameks are found in the Dewey Soper collection. Further photographs are at pp. 9 and 13 in "Hantzsch of Baffin Island" by L.H. Neatby, The Beaver, Winter, 1975, pp. 4-9.

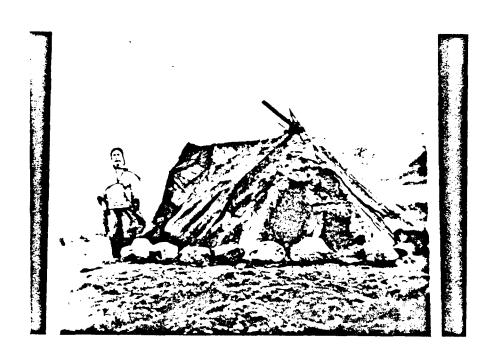


Fig. 14. Tupek at Pangnirtung. Courtesy of Ross Peyton.

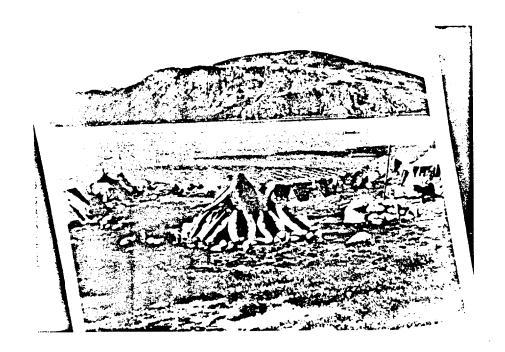


Fig. 15. Tupek at Pangnirtung. Courtesy of Ross Peyton.



Fig. 16. Summer tent or tupek. From A.E. Millward, 1930.

(b) Contents of the Tent

For bedding, layers of plants such as heather and crowberry were put on the bare ground with sealskins thrown over. The tent would have one or more "quliqs", or soapstone lamps. The quliq rested on an imported metal frame so the oil would not spill. A bag of chopped, dried cottongrass for the wick would be nearby as well as blubber for fuel.

Cooking was done in the tent and the traditional ulo knife would be present as well as imported metal pots and some utensils. A knife made of caribou antler might be present. A metal container with food in it would be present, containing seal or caribou meat. Cooking was done over the soapstone lamp. Sewing was another indoor activity and thread and needle and clothes needing repair would be at hand. A broom made out of a dried loon skin, which resembled a fan, would be used to sweep the tent. A traditional Inuit game called Uhjaga would be played indoors while sitting down. This was played which had a cleaned rabbit skull with small holes bored in the top of the cranium. A string was attached to the skull with the other end of the string attached to a 3-4 inch bone awl. The object of the game was to swing the skull out and up and to try to poke the awl in one of the holes in mid-flight, Fig. 17.

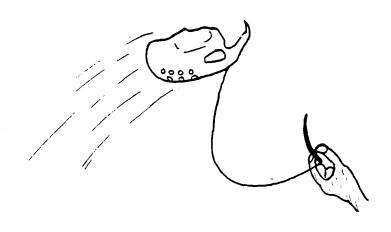


Fig. 17. Sketch of Uhjaga game.

(c) Equipment, Etc. Outside the Tent

Hunting equipment such as rifles, fish spears and harpoons might be stored outside the tent if the adult males were not away hunting or fishing, which they frequently were. A kamotiq would be nearby and so would a large metal drum for storage. There would be frames of wood for drying skins. Additionally, or in the alternative, skins were pegged to the ground with small sticks to dry.

There would be an outside fireplace with the fuel being the same plants used for bedding. A wooden platform much like a lectern would be present for the purpose of scraping blubber off sealskins with an ulo, Fig. 18.

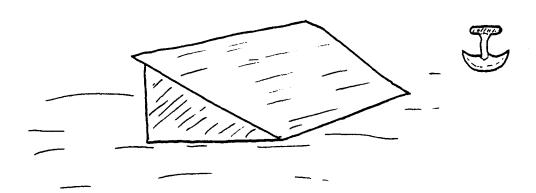


Fig. 18. Sketch of wooden platform with ulo.

Balls for playing games were made of the skin of seal or caribou, the former being preferred. Outside a game called Iutuk ("I-you-tuk") was played with a sealskin ball and a playing stick made of a wooden handle with a skin strap handle and skin thongs. It resembled a cross between a tied up cat-o-nine-tails and the end of a lacrosse stick. The object of the game was to pick up the ball in the "pocket" of thongs and run as fast and as far as one could without dropping the ball. A net of whalebone might be present in which case the object was to score by throwing the ball through the net, Fig. 19.



Fig. 19. Sketch of stick used in Iutuk game.

(d) Clothes

The people at the summer camp would be dressed in traditional Ring Seal skin clothes. These were light and waterproof. They may have a lining of fuzzy, baby seal skin for extra warmth. Caribou skin clothes were used during the winter and when the men went hunting. A set of the caribou skin clothes could be present to show the visitor the difference. The Dewey Soper photograph collection has many pictures of Pangnirtung residents wearing traditional clothes in the 1920's.

(e) Activities at the Camp

What are some of the activities at the camp which the visitor could either observe or participate in?:

- (1) sewing clothes and/or making a sealskin bag or footwear;
- (2) playing games such as "Uhjaga" or "Iutuk";
- (3) scaping blubber off a sealskin using ulo and wooden platform;

- (4) repairing or cleaning hunting equipment;
- (5) repairing kamotiq;
- (6) pegging sealskins on the ground to dry;
- (7) erecting or repairing the tent;
- (8) sweeping out the tent with the loonskin brush;
- (9) preparing and eating a meal of caribou, seal or char with bannock and tea;
- (10) collecting nearby edible plants;
- (11) snacking on a delicacy such as beluga skin (muktuk) or plants such as berries, mountain sorrel or knotweed;
- (12) rolling up lumps of dried cottongrass, dabbing a few drops of oil on them and starting up a soapstone lamp;
- (13) making an outside fire of dried heather or crowberry; and/or
- (14) carving a caribou antler knife.

Development of the Summer Camp Site

(a) Construction of Equipment and Supply of Material

The trail to the site was completed during the summer of 1983. The equipment and materials should be made or obtained during the winter of 1983-4. By July and August of 1984 the camp should be operational. There may be a problem in timing the construction of a summer tent. One member of the Saipalasiikut Society indicated that seals of the appropriate size are taken in the spring. If the skins must be dressed in a certain way (as above) then there may not be the appropriate skins available during the winter of 1983-84. Later, there was an assurance there would not be a problem in constructing a tent over the winter, but this difficulty with skins may have been overlooked at that time.

It was indicated to the Saipalasiikut Society that it was contemplated that the Society might be asked to participate in a work program during the winter of 1983-84 for the purpose of building the equipment for the camp and was told that all of the above-mentioned items could be made by the members. Many of the items are represented in the Museum's displays such as: sealskin tent; soapstone lamps; dried cottongrass; loonskin broom; caribou antler knife; Uhjaga game; fish spear; harpoon,

ulo; wooden scraping platform; Iutuk game; and sealskin and caribou skin clothes. While the question wasn't raised it is presumed that the above items would not be loaned as they are part of a permanent display and that duplicates would have to be made or otherwise obtained.

The elders would naturally expect to be paid for their efforts over the winter. It is difficult to assess whether arranging a grant to the Saipalasiikut Society in return for the Society organizing the performance of prescribed work by various members from time to time, or contracting with specific individuals to do specific work is best. The Society is probably not a legal entity capable of entering into a contract. The former alternative would be the most flexible as it may be easier to negotiate a lump sum for a prescribed list of equipment and material than it would be to attempt to calculate the material and labour cost of specific items.

The following equipment and materials should be obtained:

- (1) sealskins for tent, plus skin for sewing skins together;
- (2) driftwood and whalebone ribs, if available, for frame of tent;
- (3) a large quantity of heather and crowberry for bedding and for an outdoor fire;
- (4) sealskins for bedding material;
- (5) a large metal drum for storage;
- (6) a kamotiq with thongs and wood for repair;
- (7) a rifle, fish spear and harpoon;
- (8) sealskins in various stages of preparation, ie: with blubber (to be scraped), raw skins, dried skins;
- (9) wooden frame and string for drying skins and pegs for stretching skins out on the ground;
- (10) sealskin and caribou skin clothing, for members of family to wear, and extras to show how they were made; along with skin footwear. An example of baby seal fur linings should be available;
- (11) soapstone lamps with supply of oil;
- (12) wooden skin scraping platform with ulos;
- (13) various ulos, utensils and pots for cooking;
- (14) a sealskin bag of dried cottongrass for soapstone lamps;

- (15) food storage pots;
- (16) sewing equipment;
- (17) a cleaned rabbit skull, string and bone awl for Uhjaga game;
- (18) several sticks with thongs, sealskin balls (with caribou skin ball for comparison), whalebone nets for playing Iutuk game;
- (19) loonskin brush;
- (20) caribou antler knife;
- (21) water pail;
- (22) bannock ingredients flour, lard, etc.;
- (23) tea;
- (24) muktuk;
- (25) seal, caribou and char meat for eating;
- (26) berries, mountain sorrel and knotweed for snacks. (These can be collected nearby although bearberry, crowberry and bilberry are not ripe until the end of August);
- (27) metal frame for soapstone lamps to rest on;
- (28) chemical toilet or honeybucket in an enclosure should be available;
- (29) if the tent is not big enough for 10-12 people, then a visitor tent/shelter should be constructed at the site although this would detract from the traditional nature of the visit.

(b) Organization of Activities

There should be a logical pattern of activities which the visitors can observe and participate in. Instead of a party of tourists suddenly arriving to hover awkwardly around watching a portion of the tent being erected or repaired, for example, the visitors should be greeted and offered something to eat much as if they were friends or relatives arriving at a summer camp 50 years ago. Introductions would be made and the visitors could relax a bit while sitting around a soapstone lamp watching food be prepared. While they should already have a general idea of what they will be doing or seeing during the visit, they should be given a more specific programme of what is to follow "lunch" (although at that time it should be mentioned that traditionally there were no set times for meals). During "lunch" the details of preparing food, diet and the operation of a soapstone lamp could be discussed and demonstrated.

Following "lunch", the visitors could be shown the interior of the tent, watch clothing be repaired, the place being cleaned up and they could perhaps try their hand at "Uhjaga". The types of traditional clothing could be discussed. Outside they might watch a part of the tent being erected or repaired or a kamotiq being fixed. From there they could try scraping blubber off a sealskin and assist in stretching a skin out on a frame. A discussion of hunting equipment and technique might follow.

Toward the end of the visit a game of Iutuk might be played. This would be followed by sitting by the outside fire and snacking on muktuk, berries, mountain sorrel and knotweed, washed down with tea. The entire party, Inuit family included, would then pack up and leave by boat for Pangnirtung.

(c) Operation

How will visitor awareness, booking of appointments with the camp family and outfitter, departure of family, visitors to site, and departure back to Pangnirtung be coordinated?

To effect visitor awareness, a display with photographs and a description of the day trip should be located in the Tourism Centre. As well, a simple leaflet (single page) should be available and should contain: the general outline and objectives of the trip; the necessity of making an appointment; and a map of the trail.

Alternatively, a much more comprehensive brochure might be prepared with historical photographs and numerous sketches of tools, clothes, dwellings, etc.

The Nuvoatiakalla Summer Camp Day Trip, as it may be called, should be available Monday to Saturday. However, it should operate in response to visitor demand by appointment only. In other words, the camp family will not go out to the site every day and hope someone drops by. Appointments should be made through the Community Host at the Tourism Centre. A minimum lead time should be set, eg. 1 or 2 days in advance. This will give the Community Host an opportunity to confirm that the camp family is available, a boat or boats is/are available, that there is no problem with food supplies, etc. This will allow an orderly booking of appointments so as to avoid conflicts or overbooking. The Community Host should post a notice on a board in the

Tourism Centre if only 2 or 3 people want to go in order to attract other visitors to make up a full group of 6.

The MMM study recommended that there be 6 visitors per group with one trip per day. This should be followed as the objective of the day trip is a visitor's immersion in the traditional Inuit way of life with as much "learn/observe/experience" time as practical. The study projected 270 user days in the 4th year. This would be 45 trips of 6 people each. Excluding the two statutory holidays in July and August but counting Saturdays this estimate predicates full bookings for those two months. As many factors go into overall tourist visitation to an area it can't be assessed in advance what visitation will be achieved every year. If full bookings are achieved in the future, the camp family could count on being at the site every day. This would alleviate the tediousness of being "on call". Moreover, an outfitter could be booked for the entire summer and do away with the potential problem of not having a boat available if only a day or two advance warning of need is given. It remains to be seen whether there will be a family of 4 or 5 available on an "on call" basis before full bookings can be achieved.

On the appointed day, the group of visitors should leave Pangnirtung about 1-1/2 hours before the beginning of the next high tide. On arrival at the camp the group would be involved in activities for about 2 hours with a departure time as the tide was on its way out. It takes fifteen minutes to go to the site on boat from Pangnirtung and giving the camp family 1/2 hour to set up camp (keeping in mind that most material will be left at the site), they should leave Pangnirtung as soon as they can before the high tide reaches its peak. They should be told by the Community Host the estimated time or arrival by the visitors at the camp, based on a 2-1/2 hour walk from Pangnirtung.

The MMM study suggested that the visitor group be accompanied on the trail by a guide. The necessity of this is not clear if the trail is marked with inukshuks and a map is provided in a leaflet. What is necessary is that one member of the camp family speak English and be able to interpret if the older members speak only Inuktitut. The person would go out in the boat with his or her family ahead of the visit. Although creating local employment is the major goal of a government sponsored tourism plan, one must keep in mind the economic feasibility of the day-trip.

What of the outfitter providing boat transportation? If there are 6 visitors per group, that will comprise one boatload. Thus, if the camp family is to get there and back they must have their own boat. The outfitter would be scheduled to arrive as the tide is going out on the appointed day. Unless full bookings can be predicted, the outfitter would be hired on an "as needed" basis through the Community Host, and no specific outfitter need be hired for every trip. This assumes that it is not safe to have 10-12 people in one boat. If only 2 or 3 visitors are making the trip they could come back with the camp family. The total cost to the visitors would be reduced slightly and the amount the camp family earned would be increased slightly.

The Community Host would be responsible for making appointments with visitors, notifying the camp family of the date, hiring an outfitter for the return trip and overseeing the smooth operation of the programme.

The camp family would be responsible for:

- (a) getting the necessary skins, food material and other items or equipment to the site;
- (b) providing demonstrations, instruction and hospitality for the visitors; and
- (c) packing up (including waste material/honey bag) for the return trip.

(d) Costs

The estimated capital cost of the Camp according to the MMM study is \$7,850.00 spread over 4 years with \$5,845.00 allocated to 1983-4 (Year 3 of the Plan). It is not clear what these estimates were based on.

It would certainly cost about \$5-6,000.00 to have the Saipalasiikut Society make the equipment and items for the camp, but since information as to costs of particular materials, and what the elders would expect to be paid for their efforts, is lacking the capital cost of the project is something to be negotiated with the Society. Few of the materials necessary can be bought. They are natural materials to be obtained by those who build the equipment. A portable chemical toilet can be purchased for about \$200.00 including freight (see Part VI).

As for the cost of hiring a family of five to act as the camp family for the summer, it is difficult to say whether anyone would want to be paid on an "on call" basis. That is, paid per appointment. The family members could not hold other wage employment if that were the case. There should be children at the camp and it is more than likely that it would be a member of the family in his or her teens or 20's who would be sufficiently bilingual to interpret. All members of the camp family would not be paid the same if there were children involved. Perhaps a lump sum for a family could be negotiated.

It may well be that the only way the plan could be self-supporting once capital costs have been paid would be to pay the camp family on an "on call" basis (again assuming that full bookings are not initially achieved).

In any event, what would the camp people receive? Assuming \$10/hour for a 6 hour day, that would be \$60/day for the two parents, and it is suggested, for the teenaged/early twenties interpreter. Perhaps \$20/day each for two small children and that would be \$220.00 a day for the family. Another \$30 might be allocated to daily food and operational costs, for a total of \$250. The family's transportation would be included in the \$30.

Assuming that the outfitter's services would cost \$50 for the return trip, the total cost would be \$300 a day. For a 6 person group, this would be \$50 per visitor. Fifty dollars per person for a day-trip involving such a high level of "learn/observe/experience" time is appropriate.

PART V KEKERTEN and USSUALUK WHALING STATIONS

The objectives of this portion of the contract were to:

- (a) accompany a team of archeologists from PWNHC and obtain information in order to report on the tourism/interpretive potential for boat tours to the Kekerten and Ussualuk whaling stations; and to
- (b) prepare a draft brochure outlining the history of both whaling stations.

During the course of fieldwork it became apparent that the objectives would have to be modified for a number of reasons. First, Kekerten is an extremely rich site because it contains over 300 features visible without excavation. Further, the site is fragile. It is difficult to walk across the site without stepping on features or artifacts. Many of the artifacts could be easily pocketed or disturbed by visitors. The site is surrounded by numerous human graves of which the majority have visible and accessible human skeletal remains. It was the opinion of the PWNHC team that the site warrants a long-term research effort and that steps must be taken to protect the site and its features, particularly the graves, before tourism development can proceed.

It was felt that a draft brochure would be premature. It would not be used in the near future. With anticipated research at the site and in Pangnirtung, it would rapidly become out-dated. Instead, the contractual objectives were modified so that further work would be done as follows:

- (a) enlarge the report on the interpretive potential of the Kekerten site to suggest interpretive themes likely to be developed by the prospective research;
- (b) prepare a bibliography of resource material on the two sites; and
- (c) recommend a development plan for the Kekerten site.

Five days were spent at Kekerten and one at Ussualuk. Discussions were held with the PWNHC personnel at both sites. The archeological permit application submitted by the PWNHC's principal investigator, Marc Stevenson, gave the primary aim of the project as the assessment of the potential of the sites for tourism development and the assessment of the sites' research potential to illuminate processes of aculturation and change in the Cumberland Sound area during the period of whaling activity. Dr. Ellen Bielawski and Dr. Martin Weaver conducted research at the Kekerten site with Stevenson for 6 days with a further day at Ussualuk. Stevenson spent a further 2 weeks at Kekerten.

A preliminary inventory of surface features was taken at Kekerten by the PWNHC team. Major features were photographed or sketched. A small number of artifacts were collected for preservation and study in Yellowknife. The area was surveyed and a site map was prepared. A kamek (sod house) was excavated as a test site.

The Ussualuk site is more recent and less rich than Kekerten. A quick survey of its features was done by the PWNHC team.

Members of the Pangnirtung community, including members of the Tourism Committee and the Hamlet Council, visited Kekerten while the PWNHC personnel were there. Concerns about the human remains and the pace of development were discussed. An elder of the community, Etooangat, who was born in 1901 and who lived at Kekerten in his youth, toured the site with Marc Stevenson and provided much information about life at the whaling station.

The area around the Kekerten site was explored. Four coffins were found on the island across the harbour from the site. The observation cairn on a hill to the south of the site was visited as were cairns on several other hills on Kekerten Island. A trip was made to the New Bedford Whaling Station in Massachusetts to determine what resources were available for future research.

Overview of the Kekerten Site

The Kekerten whaling station is located on the north end of Kekerten Island on the east side of Cumberland Sound at the mouth of Kingnait Fiord, Fig. 20.

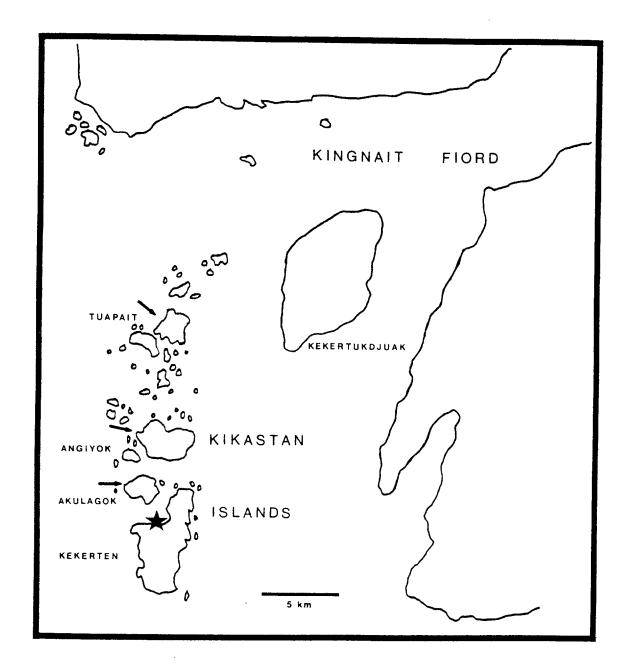


Fig. 20. Location of Kekerten whaling station.

An aerial photograph from the Air Photo Sales department of the GSC was rephotographed and enlarged. Fig. 21 is of the island and Fig. 22 is a closeup of the Kekerten harbour.



Fig. 21. Aerial view of Kekerten island. Most of the hills on the island have cairns on the top.

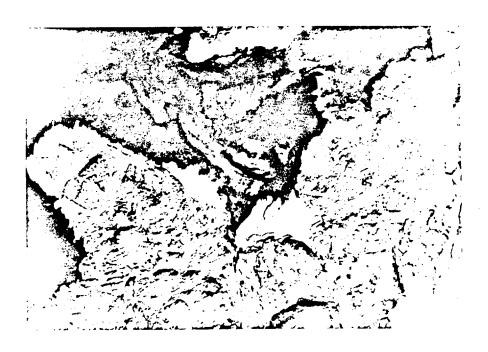


Fig. 22. Close-up aerial photograph of Kekerten harbour.

The following is a rough map of the major features surveyed at the site by the PWNHC team, Fig. 23.

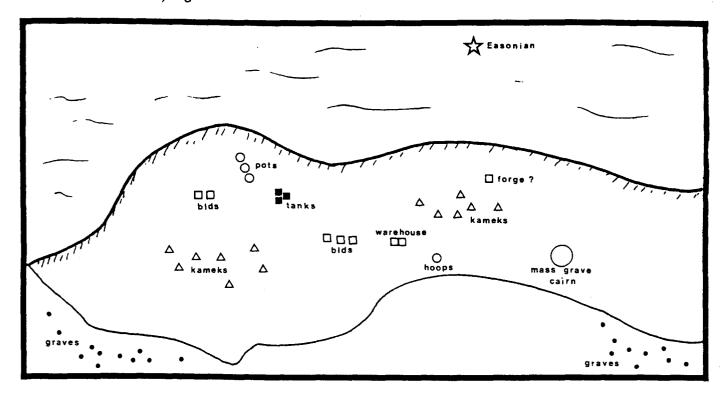


Fig. 23. Major features at Kekerten.

Most features are located on a "plain" of thick sod cover which slopes to a granite shoreline. The rocky shore has several natural ramps for pulling up boats (and whales). The topography rises abruptly to the south of the plain in a series of granite terraces with poor tundra cover. The rich plant cover of the plain is undoubtedly due to many years or organic material being deposited by residents of the site. It is in contrast to cover found elsewhere in the area.

The major features of Euro-American origin in terms of visibility are:

- (a) three try pots, two of which are still standing over their original fireplaces;
- (b) three large metal tanks (probably converted ship's boilers or water tanks) also used in the processing of blubber;
- (c) large stone foundation of a pre-fabricated warehouse;

- (d) stone foundations of several other warehouses or residences;
- (e) the remains of a forge and/or a coal storage bin;
- (f) the wreck of a ship, "The Easonian", visible in the harbour at low tide;
- (g) hundreds of barrel hoops in a pile on the east side of the site;
- (h) hundreds of metal artifacts (primarily ship fittings); and
- (i) metal spikes in rocks by the water indicating mooring sites or pulley bases.

The major features of Inuit origin are:

- (a) dozens of kamek foundations; these are of different shapes and sizes;
 some have deep central depressions and others are more like stone tent
 rings;
- (b) dozens of graves (rock cairns) and coffins made of wood from a variety of sources;
- (c) numerous artifacts such as copper quliqs, worked bone and wood, etc.; and
- (d) small tent rings presumably built by children.

The heavy sod cover obscures a far richer site. During the course of fieldwork many artifacts were found by feeling lumps in the sod under one's boots. The many small artifacts found in the excavation of the kamek suggest that innumerable items of Inuit material culture await further research. A number of features and artifacts are illustrated in Figs. 24 to 32.

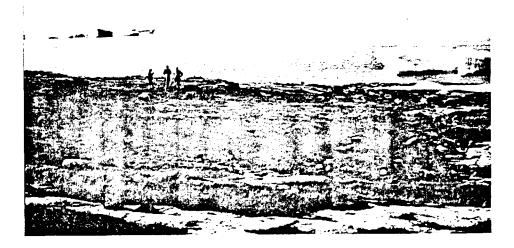


Fig. 24. Try pots and tanks located near shore.

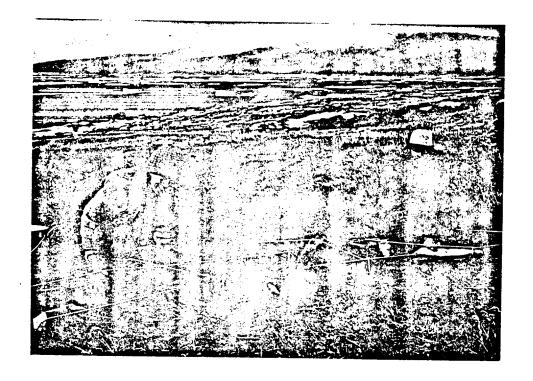


Fig. 25. Archeologist Dr. Ellen Bielawski and assistant excavating kamek. $\,$

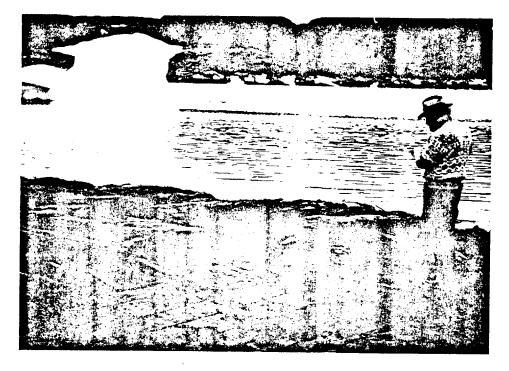


Fig. 26. Archeologist Marc Stevenson standing on wreck of The Easonian in Kekerten harbour.



Fig. 27. Archeologist assistant, July Papatsie, examining grave on Akulagok Is. across the harbour from Kekerten.

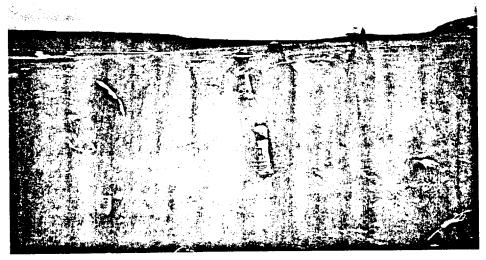


Fig. 28. Members of the Pangnirtung Tourism Committee and the Hamlet Council visiting the site.

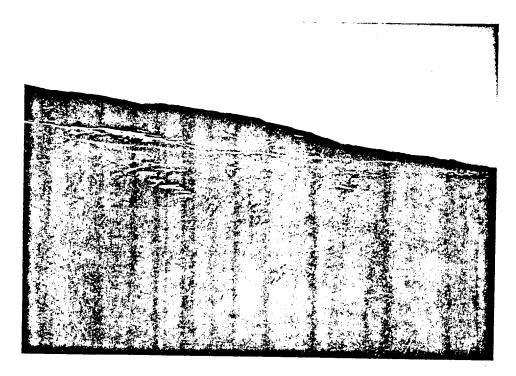


Fig. 29. Stone foundation of warehouse.

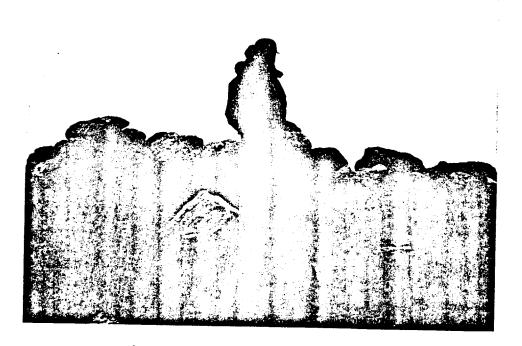


Fig. 30. Kanea Etooangat standing in stone observation post south of the Kekerten settlement. When an observer saw a whale in the Sound a nearby flag was raised to alert the whaling boats.



Fig. 31. Members of the Wakeham expedition in 1897 standing around the same observation post as in Fig. 30. From A.E. Millward, 1930.

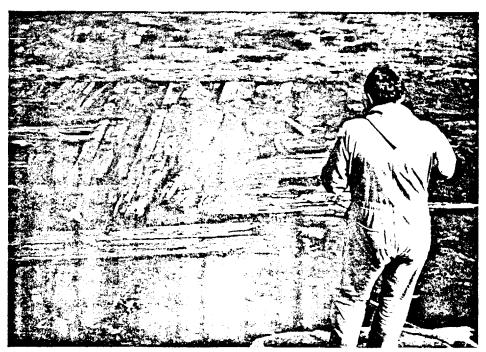


Fig. 32. Archeologist Dr. Martin Weaver examining wreck of The Easonian.

Interpretive Potential of Kekerten

The interpretive potential of Kekerten is very great. A measure of interpretive potential of a site is the number of themes generated by what a visitor can actually see or experience at the site. Although the list is certainly not restrictive, the following themes are the major ones which can be recognized at Kekerten:

- (1) the history of Arctic whaling in Cumberland Sound;
- (2) life in an Inuit whaling station;
- (3) mutual exploitation: the exchange of skilled labour for non-indigenous technology and materials;
- (4) the technology and pattern of the hunt, before, during and following the European whalers;
- (5) the biology of the prize and qualities of the material;
- (6) processing and storing the catch and products;
- (7) human biogeography, the pattern of Inuit movement and settlement before, during and following the European whalers;
- (8) cultural influences of the European whalers on the Inuit;
- (9) maritime heritage, European and Inuit marine technology.

In developing the themes it was recognized that the interpretation of Kekerten for visitors must be primarily from the Inuit point of view. The first reason is that the current inhabitants of the area around Cumberland Sound are virtually all Inuit and it was their ancestors who, though not the instigators, were certainly the primary participants in the activities of the whaling stations. This in itself is comparatively significant because earlier whaling activities here and whaling activities elsewhere in the Arctic were ship-based and did not rely on Inuit skills and labour as much as the shore stations. The second reason is that significance of the whaling stations lies not in what negligible or irrelevant effect either the Inuit or whaling had on the people of Scotland or of America, but lies in the profound effect whaling and the European presence had on Inuit culture and technology.

(1) The History of Arctic Whaling in Cumberland Sound

Having just stated that interpretation should be from the Inuit point of view, we might deal first with the theme which least lends itself to that approach, so as to point out the difference. As "history" normally means a period when a recorded interpretation of the past is available, we find that for the Inuit there is virtually nothing written available. The Inuit are mentioned in the records of the whalers and other Europeans but certainly not to the degree we would like today for interpretive purposes. This simply points out the importance of obtaining an oral history from the elders of Pangnirtung as well as the importance of archeological investigation.

The above-titled theme is important as it something which is expected by visitors and it is a theme which provides a chronological framework of events for most of the other themes. Is is the easiest theme to develop.

The following is such a chronological framework. As well as a chronological framework, this theme covers a sub-theme of life as a European in the settlement. Other than the daily and seasonal pattern, this sub-theme would cover the material culture pertaining to the Europeans on the site.

- 1585 Davis enters Cumberland Sound
- 1616 William Baffin writes of potential whale fishery in Davis Strait.
- 1729-1770 Dutch whalers in Davis Strait.
 - 1773 English whalers in Davis Strait.
 - 1818 Ross fails to enter the Sound due to ice.
 - 1839 Captain Penny meets Eenoolooapik of Cumberland Straits and takes him to Aberdeen.
 - 1840 Penny enters Cumberland Sound with Eenoolooapik on Bon Accord.
 - 1841 Captain Wareham of Lord Gambier renames Hogarth Sound as Northumberland Inlet.
- 1844 & 1945 Penny's two whaling trips on St. Andrew to Cumberland Sound.

1846-1852 Americans send one ship to the Sound every summer. American whalers winter at Niantilic in the Sound. 1851 Howgate present. 1852 Royal Arctic Company formed by Penny. 1853 Penny spends winter at Kekerten. 1853-1858 Americans send 5 ships to the Sound every year. 1857 Penny winters at Kekerten with Brother Warmow. 1863 Penny's last voyage to the Sound. 1870 Hudson Bay Company turns over Arctic to Canada. 1877-1888 Kumlien of the American Howgate expedition on the Florence winters in the Sound. 1880 Bowhead whale almost extinct. 1882-1883 German Polar Expedition at Clearwater. 1883 Franz Boas arrives on the Germania. 1895 Rev. Peck arrives at Blacklead. 1897 Wakeham expedition arrives at Kekerten on the Diana. Rev. Greenshield arrives at Blacklead. 1901 1903 Low visits the Sound on the Neptune. 1905 Synthetic substances begin to replace baleen. 1908-1909 Bernier expedition arrives at Kekerten. 1909 Hantzsch arrives at Blacklead. 1913 Ernest William sinks in the Sound. 1915 Kekerten purchased by Robert Kinnes. 1918 Arctic Gold Exploration establishes Ussualuk.

1921 HBC establishes Pangnirtung post.

1922 The Easonian sinks at Kekerten.

- 1922 Kekerten sold to HBC.
- 1923 RCMP establishes Pangnirtung detachment under Wilcox.
- 1923 Ussualuk sold to HBC.
- 1925 Kekerten closes.
- 1926 Blacklead closes.
- 1933 Ussualuk closes.

(2) Life in an Inuit Whaling Station

We know from the records of the Europeans that the number of Inuit living and working at Kekerten was usually over 100 people. We can also see just from walking over the site that the number of Inuit building remains outnumbers those of the Europeans. Another comparison would be total floorspace of the Inuit structures as opposed to the Europeans. Far from being a European whaling station, the site could well be called an Inuit whaling station.

A favourite historical interpretive mechanism is to put the visitor in the shoes of a participant of past activities. The approach is "imagine yourself as a man, woman or child living or working as an Inuit at the Kekerten station. What would life be like for you? What would you wear, eat, work with, play with? What would be your daily pattern of activity and what would be your seasonal pattern of activity?" A comparative approach to these questions is recommended. In other words, how was life in the settlement different from life before the whalers arrived?

In developing this theme, we should be careful not to mix themes. Particularly, the themes numbered 3, 4, 6, 7 and 8 should be isolated. If an interpretive vehicle such as a guided tour, photographic display, slideshow or brochure interprets different themes at the same time, it should be done consciously. Visitors forget and do not learn or enjoy as much when interpretive themes get tangled.

The following is a list providing a descriptive framework of life in an Inuit whaling station. Numerous questions can be generated with this list and dealt with by a variety of interpretive vehicles:

- (1) Shelter
- (2) Clothing
- (3) Food and food preparation
- (4) Water, heat and light
- (5) Family arrangements
- (6) Leisure activities games and songs
- (7) Religion
- (8) Child culture
- (9) Women's work
- (10) Men's work
- (11) Life, death and disease
- (12) The daily pattern
- (13) The seasonal pattern

(3) Mutual Exploitation: The Exchange of Skilled Labour for Non-Indigenous Technology and Materials.

This is a fairly abstract theme but it is central to two ideas. First, it is likely that there would not have been a whaling station if either the Europeans or the Inuit could not have obtained what they wanted from each other. It is likely that the Europeans could not have afforded to operate land stations without obtaining assistance from the Inuit for clothes, food, knowledge of the land and of the sea mammals, the labour for construction and maintenance of the stations as well as the repair and manning of the whaling boats. It is common sense that the Inuit would not have provided such assistance if they were not having their wants satisfied as well, ie. if they could not obtain a stable source of food when hunting was poor, or did not receive metal tools, luxury items such as tobacco or alcohol, wood for their homes, rifles and ammunition. It is unlikely that the Inuit would have remained at the stations if the Europeans had attempted to prevent them from doing what they'd always done, go hunting on their own account for example.

Second, while this idea impinges on other themes, the development of mutual exploitation led to profound influences on the Inuit when the other party to the arrangement packed up and sailed away.

Should this theme be developed as mutual exploitation or mutual assistance. The latter phrase certainly has a friendlier, non-offensive tone to it. I do prefer the former because on common sense grounds alone, I think there was at least unspoken or non-articulated coercion on both sides. If you were a European whaler would you not fear the possibility that the Inuit would disappear and leave you without fresh meat or the hands to operate the whaling boats in the spring and fall? It would be a fear based on both personal and economic survival. If you were an Inuk would you not fear the possibility that the Europeans would withhold ammunition or food staples that you were accustomed to rely on when the hunt was poor? Even if you, as an Inuk, were far better equipped to survive on the land if the Europeans became retentive or left, would you not wonder how your children would make out when you saw that they were spending more time repairing the whale boats than they were practising the traditional hunting skills which had always meant survival? The above is highly speculative. How can we know today the thought processes of those who lived before us?

There is another component to exploitation other than coercion and that is the lack of knowledge by the other party of how much you are dependent on them. Did the Inuit realize how dependent the whalers were on them? Did the Europeans realize how much easier life was with rifles, metal knives and wood for building on the part of the Inuit?

How can such interdependence be portrayed in an interpretive sense?

- spatial relationship of Inuit dwellings to European structures; a more tenuous interaction may be exemplified by Inuit visiting moored ships or trading sites;
- (b) correlation with theme #2 by showing materials and supplies of European origin in Inuit dwellings;
- (c) photographs and recollections of people such as Etooangat with regard to Inuit woman hauling whaleboats, outfitting whalers (both European and their own men) processing the captured whales; correlation with theme #6;
- (d) photographs and European records of European use of Inuit clothing and food;

(e) correlation with theme #4 with Europeans taking advantage of pre-European whale-hunting techniques such as using tides and bays for whale-driving; there are written accounts of this.

(4) The Technology and Pattern of the Hunt; Before, During and Following the European Whalers

In a sense this theme is a sub-set of themes #2 and #3. Yet given that the sole purpose of the Europeans at Kekerten (or at least the original and primary reason) was to obtain whale products and it was this goal which required them to seek assistance from the Inuit, this theme deserves isolated treatment.

Although the "little ice age", with its effect on ice coverage and the availablity of the bowhead, had already had an impact on the whale-hunting activities of the mainstream Thule, their descendants in the Cumberland Sound area before the arrival of the European whalers were engaged in whale-hunting utilizing non-European technology and following a distinctive hunting pattern. What do we know of pre-European Inuit whale-hunting?

The Europeans and Americans had developed their own whale-hunting technology and patterns of hunt prior to arriving at Baffin Island. What were they? There is evidence that European whale-hunting activities differed marginally from those of the Americans. In what ways? There is also evidence that European/American whale-hunting technology in general was modified over the time period of their activity in the Arctic. In what way?

What did the Europeans learn from the Inuit and vice-versa with respect to whale-hunting? Did the Europeans ever use, prior to contact with the Inuit, the Inuit technique of driving whales into bays at high tide? Did the Inuit ever do this with the bowhead or was it simply after the bowhead population declined that this pattern of hunt was adopted for the beluga?

What happened after the Kekerten station was abandoned by the Europeans in 1925? What other stations were still operating? Did the Inuit at Kekerten stay there for awhile after the Europeans sailed away or did they move to other stations. Did they

move to Pangnirtung and take part in the white whale operation there. None of the above? This obviously correlates with theme #7.

(5) The Biology of the Prize and Qualities of the Material

With a seeming preoccupation with human history, culture and technology, we should not forget the essential biological characteristics of the prize: the whale. What species were hunted and where? What were their behavioural characteristics which affected the hunt. What were their reproductive characteristics which defined to a large extent the potential recovery? What whale products were sought during what periods of time? What were the European markets like? What whale products did the Inuit use? Did their use of whalebone, muktuk and skin change over time? After the whalers abandoned Kekerten, what was the status of the whale populations and how did this subsequently affect the Inuit? What were the changes in Euro-American technology and fashion which affected the use of products overseas and therefore the hunting of the whales in Cumberland Sound?

(6) Processing and Storing the Catch and the Products

Kekerten was, of course, not just a harbour for ships, nor is it a mere repository for European and Inuit dwelling remains. It was an industrial site. This theme focusses on the processing of the whale catch; the rendering of whale to whatever products were then in demand.

What condition were the whales in when brought to the station. Was any processing done elsewhere? What was the step-by-step processing and storage from the arrival of the whales in the harbour until the whale products were shipped out? What was the daily, seasonal or opportunistic pattern of processing?

What were the roles of the male and female Inuit as well as the role of the Europeans in processing and storage? Who did what?

(7) Human Biogeography

3

What was the pattern of Inuit movement and settlement before, during and following the European whalers?

The Thule Culture was experiencing dramatic change as a result of a change in climate at about the same time European explorers and whalers were first arriving in the Arctic 150-250 years ago. The "Little Ice Age" had increased the thickness, extent and duration of marine ice cover and had thus decreased the availability of the bowhead whale. The Thule people had become more nomadic in their quest for other food sources. They lived in smaller groups and their homes were of a less permanent structure.

The works of the anthropologist, Franz Boas, would reveal much about the distribution of Inuit settlements in Cumberland Sound in the latter part of the 19th century. What other historical records or archeological research would give a better picture of the evolution of Inuit settlements over the last 150 years? The research done by Peter Schlederman should be reviewed. What do the elders of Pangnirtung have to say about such things during the first quarter of the 20th century?

1

What further research might reveal is the coalesence of Inuit settlement around the Cumberland whaling stations during the 19th century followed by a dispersal when the whalers left. For the first couple of decades after Pangnirtung was established in 1921 there were only a few Inuit who ever lived there. Pangnirtung did not begin attracting appreciable numbers of people from the camps in the Sound until the late 1950's and early 1960's. But were the number and location of camps and the number of people in them the same after the cessation of whaling as before the whalers arrived?

(8) Cultural Influences of the Euro-American Whalers on the Inuit

How was the material culture of the Inuit affected by the arrival of the whalers? Did the whalers act as traders by bringing goods specifically to trade with the Inuit? Questions will arise around the following:

- (a) Shelter
- (b) Clothing
- (c) Cooking and sewing utensils
- (d) Transportation
- (e) Hunting equipment
- (f) Tools

How were the more abstract aspects of culture affected? The following will be considered:

- (a) Games and music
- (b) Carving and other art forms
- (c) Religion
- (d) Education
- (e) Male/female relationships
- (f) Social organization

(9) Maritime Heritage

This theme would not arise were it not for the wreck of "The Easonian" in the harbour. The theme does not contribute very much to the central theme of the cultural interaction between the whalers and the Inuit.

One way in which "The Easonian" could be dealt with is as a focal point for Arctic marine technology in general. In other words, the evolution of water transportation from Thule culture to contemporary times could be examined. Umiaqs, kayaks, whaling boats and the freighter-canoe might be a progression that could be followed. How were each built, what were (are) they used for and what were (are) the advantages and limitations of their functional design. Did the Inuit come to own their own whaleboats and then hire themselves out to whalers? This happened in Hudson Bay. Did the Inuit use whaleboats on their own account? Did this lead to easier mobility for fall hunting? Did the acquisition of whaleboats create new leadership roles?

The technological demands made by a rugged coastline, ice floes, deadly cold water, erratic weather and marine food resources could be examined.

* * * * * * *

Marc Stevenson suggested the following thematic breakdown:

Interaction of the two cultures and resultant change in traditional Inuit lifeways.

- (1) Interaction of Inuit "whalemen":
 - (a) exploitive relationships (both sides of the coin)
 - (b) mutual interdependence
 - (c) social side effects
- (2) Change in traditional society:
 - (a) changes in technology
 - (b) changes in subsistence/settlement patterns
 - (c) changes in inter-personal relationships
 - (d) changes in inter-band relationships

It is important that archeological and historical research and tourism development be correlated. On one hand the scientific pursuit of truth ought to know no bounds. On the other hand, the emphasis of research should be on anthropological and historical questions which are closely related to "interpretive questions". The latter are questions which will occur to the informed lay person when visiting the site, or at least will appear as interesting, relevant questions when posed by a tour guide (or through other interpretive vehicles. There is a dynamic interaction between research questions and interpretive questions. Neither set of questions necessarily leads the other in time although it is expected that the researcher, being more informed than the hypothetical informed lay person, will more frequently originate new areas of inquiry.

The framework suggested by Stevenson is similar to the set of nine themes discussed previously. Both frameworks are oriented to changes in the traditional Inuit way of life which occurred when the two cultures came together.

There is a danger focussing on abstract themes in interpretation. Very few visitors will have their pulse quicken or the hair on the back of their neck stand on end when being shown how the prevenience of artifacts in the third visible layer of an excavation is evidence of sexual dimorphism in human beings. The human element is lacking.

Within the thematic framework(s) articulated above, and regardless of what interpretive vehicle is used (tour, brochure, slideshow, etc.), it is important to bring the

past to life for the visitor. There must be sufficient information available to provide a "thick description" of life in the Inuit settlement at Kekerten. The visitor must be placed in the shoes of an historical participant. To paraphrase Dr. Bielawski, the visitor must be able to:

"... see Kekerten as a seething hive of activity at most times of the year ... the alternating periods of noise and quiet, the activity between the houses, at the boat ramp and processing area, the excitement when sleds arrived from the floe edge, ... the stench during the warm months of whale processing. Can the visitor standing on the rocks looking out over the thick sod which now shrouds the remains of the settlement come to see the dim glow of oil lamps and lanterns through tent walls and roofs on an autumn night, with the quiet of approaching winter,... or can he see the long dreary days and nights of summer light under rain clouds pass by as those below in the camp wait for the returning hunters."

Development of Kekerten

The interpretive potential of Kekerten is great. How can that potential be realized? What is the tourism potential of Kekerten? The interpretive and tourism potentials of a site are not the same thing. For example, the tourism potential of Kekerten would be nil of the Pangnirtung community decided that the human graves at the site could not be treated with sufficient respect. The tourism potential of the site would be low if the boat trip was too long or arduous.

What are the constraints or limitations to tourism development? What are the requirements of site development?

Mechanical failure of the boat motor is a concern. Early in the summer a party might be trapped out in the ice floes for many hours. These risks can be reduced with the proper caution and equipment. Visitors to the site must be suitably dressed. The decision of when or whether to go at all must rest with the outfitter. Would it be too much of a burden to require that Kekerten boats have radios and two motors? They should certainly have sufficient stove fuel, food and blankets for a two day delay in the Sound.

- Safety at the site. Similarly there should be a radio at the site. There should be sufficient food and fuel supplies for several days. Even if a simple day-trip is planned there should be an emergency shelter at the site. A tent may not be sufficient. High winds or curious bears might make a tent short-lived. While a bear attack may be unlikely, the out-fitter guide should be armed. There should be a medical kit at the site. Consideration should be given to holding a St. John's First Aid course for all out-fitters in the hamlet. The cost would be enormous but consideration should also be given to building an emergency airstrip. There are Twin Otter tire marks on a short gravel strip to the south of the site. If visitation is heavy then medical evacuations from the site when ice conditions are bad may be necessary some day.
- (3) Legal liability. A discussion of safety brings us to the question of liability for any mishaps which may occur. A government is not liable for policy decisions but it may be liable for operational decisions. It is a fine line. If a decision is made to develop a site and provide certain facilities or services then mistakes, negligence or errors in providing those facilities or services are actionable. Thus, any development undertakings must be carried out properly with high safety standards. The joint liability of private contractors such as out-fitter-guides must be considered. Are they insured?
- Facilities at the site. We have mentioned an emergency shelter, radio and medical kit. Toilet facilities are necessary if visitation is at even moderate levels. Water supplies may otherwise be contaminated. Toilet paper takes its time decomposing in the Arctic. If the option of an overnight stay is given then 2 or 3 tenting platforms should be built. It shouldn't be too much trouble to pack garbage out. Water supply is a problem at the site itself. Early in the summer water can be taken from ice pools by the shore. The streams through the site are laden with goose droppings. There is a small pond in the height above the site to the south.
- (5) Research at the site. If the interpretive potential of the site is not developed then neither should the tourism potential be developed. The site is boring to the uninformed visitor. It looks like a grassy plain with a few bits of metal and a lot

of depressions in the ground ringed with stones. Some might be momentarily titillated by seeing a human skull. Currently we don't know enough about life at settlement to provide authentic storylines or express anthropological concepts. Research must be done. This should be in three parts. First, a 5 year archeological investigation of the features should be planned. Second, an oral history of life at the settlement and in Cumberland Sound generally should be undertaken. The elders in Pangnirtung should be interviewed over a long period of time. They should be invited to visit the site several times. This should be correlated with the archeological research because specific questions will arise while grubbing in excavations and leads or questions answerable only at the site will arise from the interviews. If an oral history is not commenced within the next 2 years it is certain that the archeological investigation will take 4 times as long, be 5 times as expensive and still fail to provide a "thick description" of life in the settlement 60-80 years ago. elders who once lived at Kekerten are not getting any younger. Third, classical historical research should be done. A lengthy literature review of all available sources should be done.

- Research facilities. What are the requirements of a 5 year archeological investigation? As in business the return is commensurate with the capital investment. Careful consideration should be given to the design of the emergency shelter. Without spending millions of dollars the shelter can be designed so as to provide facilities for the research team as well as serve as an emergency shelter for visitors. Upon the eventual decline of hardcore research the shelter should be increasingly used as an interpretive centre. The shelter should have bunkbeds, cooking and eating space, storage room, a Honda generator, and a relatively large room which can be a living and working area and eventually a visitor display room with audiovisual capabilities.
- (7) Aesthetic considerations. Nothing in the way of shelters, tenting platforms or outhouses should be built on the site or within view of the site. A good location would be near the pond in the heights behind the site.

- (8) <u>Human graves.</u> A physical anthropologist should be at the site in the first year of development. He or she should put the human remains scattered around the site back into the right graves. The matter should be discussed in the Pangnirtung community. Development should not proceed unless this is done; the site is too fragile.
- (9) Community involvement. Oral history research and community decision-making about development is a start. Part of the research effort should involve engaging local residents as research assistants. Archeological research assistants and oral history assistants (translators are necessary in any event) could also serve as guides during development. Eventually such trained personnel will serve as guides at the established site. The out-fitters should be involved as well. They should be aware of the stages of research development. They should be informed about the general interpretive themes developed through research and they should be able to answer visitors' factual questions. Tourism hospitality does not mean being able to operate an outboard motor; they should be aware that their informed involvement is necessary.

None of the above constraints or development requirements is insurmountable. But financial commitment is necessary. So is community support. Can tourist visitation begin in 1984? There will not be 1,000 visitors at the site in the first year. Visitation will slowly increase over the years. Provided that a long term development plan is in effect it would be advantageous if some visitation began in the first year of the development plan. That way unforeseen problems can be faced early in development.

With the above caveats, tourism visitation should begin in 1984. What interpretive facilities would be available in the first year? A brochure will not be available until 1985. There will probably be few enough visitors in the first year that part of the research team's function at the site would be to guide visitors around, explain the objectives of the research, discuss the themes and concepts which are being developed and answer whatever questions arise. Much can be learned for subsequent interpretive efforts through such early interaction between visitors and the research team.

During the summer of 1984 a draft brochure should be prepared. This should contain:

- (a) advice as to clothes, weather, safety and behaviour at the site;
- (b) a map of Kekerten's location and a map of major features at the site;
- (c) reproductions of several historical photographs of the site as well as sketches of some items of material culture;
- (d) a general history of whaling in Cumberland Sound; and
- (e) a discussion of the themes outlined above with an emphasis on the development of these themes through archeological and historical research (in other words the tone should be anticipatory).

What should the boat trip cost? At the August 18, 1983 meeting of the Tourism Committee the cost of a Kekerten boat trip was discussed with several out-fitters. The following schedule was thought reasonable:

Visitors	Price
1,2	\$250.00
3	\$270.00
4	\$290.00
5	\$310.00
6	\$330.00

However, a review of out-fitters' costs throws a lot of doubt on the subjective manner in which the prices for boat trips are set. This will be discussed further in the recommendation section of this report.

Bibliography

- Albert, 1920. Logbook of the auxiliary ketch "Albert" from Peterhead to Cumberland Gulf, June 10, 1920 to October 9, 1920.
- Anderson, G. 1947. A whale is killed. The Beaver, March, 1947, pp.: 18-21.
- Barron, Wm. 1895. Old Whaling Days. Hull, Wm. Andrews & Co., 211 pp.
- Bernier, J.E. 1909. Report on the Dominion Government expedition to Arctic Islands and the Hudson Strait on board the C.G.S. Ottawa, King's Pr.
- Bernier, J.E. 1939. Master Mariner and Arctic Explorer a narrative of sixty years at sea from the logs and yarns of Captain J.E. Bernier. Ottawa, Pr. by Le Droit.
- Blake, E.V. 1874. Arctic Experiences. New York, Harper and Bros.
- Boas, F. 1884. A journey in Cumberland Sound and on the West Shore of Davis Strait in 1883 and 1884. Bull. of the Amer. Geog. Soc. vol. 3:241-272.
- Boas, F. 1887. The geography and geology of Baffin Land. Roy. Soc. of Can., Trans. 4: Sec. 4, 75-78.
- Boas, F. 1888. The Central Eskimo. U.S. Bureau of Amer. Ethnol., 6th Ann. Rpt. 1884-85:399-669, Washington.
- Bodfish, H.H. 1936. Chasing the Bowhead. Cambridge Mass., Harvard University Press.
- Brintell, L. 1970. Baffinland history revisited. North. 17 (4):9-10.
- Brintnell, L. 1978. The Rise and Fall of Kikerten and Blacklead. North/Nord March/April 1978, pp. 2-7.
- Brodie, P.F. 1971. A reconsideration of aspects of growth, reproduction and behaviour of the white whale with reference to Cumberland Sound, Baffin Island population. J. Fisheries Res. Bd 28 (9):1309-1318.
- Bruemmer, F. 1971. Whalers of the North. The Beaver, Winter 1971, pp. 44-55.
- Burwash, L.T. 1929. Across Arctic Canada, 1925-1926. Geog. Jour. 74:553-568.
- Canada, Department of Marine and Fisheries, 1911.
 - Report on the Dominion Government expedition to Hudson Bay and the Arctic Islands on board the D.G.S. Neptune, 1903-1904. Ottawa, Gov't Pr. Bureau, pp. 355.
- Canada, Department of Marine and Fisheries, 1909.
 - Report on government expedition to Arctic Islands and Hudson Strait (1906-07). C.H. Parmelee, Ottawa, iv. pp. 127.

- Canada, Department of Marine and Fisheries, 1911.
 - Report on Dominion Government expedition to the Northern waters and arctic Archipelago.
- Cook, J.A. 1926. Pursuing the Whale. London, John Murray.
- Duncan, D. 1827. Arctic Regions: Voyage to Davis Strait by David Duncan, Master of the Ship "Dundee". London, Billings.
- Erme, 1916. Logbook of the motor auxiliary schooner "Erme" from the Port of London to Baffin Land and back to Glasgow commencing 9th June, 1916, ending 1st November to 8th December, 1916. Logbook.
- Francis, D. Whaling in the Canadian Arctic. National Museum of Man, Ottawa.
- Great Britain 1850. Arctic expedition return to an order of the Honourable The House of Commons, dated 5 February, 1850. Ordered by House of Commons to be printed, 5 March 1850. Gr. Britain, Parliament, House of Commons Sessional Papers, Accts. & Papers. 35:pp. 107.
- Harper, K. 1972. Pangnirtung.
- Harper, K. 1975. The burning of the Easonian. North/Nord, May/June 1974, pp. 30-31.
- Harper, K. 1975. Historical Survey: Baffin Island National Park, Parks Canada.
- Harper, K. 1981. The Moravian Mission at Cumberland Sound. The Beaver, Summer 1981, pp. 43-47.
- Hegarty, R.B. 1959. Returns of whaling vessels sailing from American ports: a continuation of Starbuck's "History of the American Whale Fishery", 1876-1928. New Bedford, Mass., Old Dartmouth Historical Society.
- Hohman, E.P. 1928. The American Whaleman: A Study of Life and Labor in the Whaling Industry. New York, Longmans Green.
- Holland, C.A. 1970. William Penny, 1809-92: Arctic Whaling Master. The Polar Record, vol. 15, pp. 25-43.
- Howgate, H.W. 1879. Cruise of the Florence. Washington, James J. Chapman.
- Kinnes clippings, 1880-1922. [A scrapbook of newspaper clippings concerning Dundee whaling, in the possession of Robert Kinnes and Sons, Dundee, Scotland.]
- Kumlien, L. 1879. Report of explorations in Geenland. Smithsonian Inst. Ann. Rpt. 1878: 452-454.
- Lindsay, D.M. 1911. A voyage to the Arctic in the whaler Aurora. Boston, D. Estes & Co.

- Lubbock, A.B. 1937. The Arctic Whalers. Glasgow, Brown, Son & Ferguson Ltd.
- MacMillan, M. 1948. Green Seas & White Ice. New York, Dodd, Mead, 287 pp.
- Markham, A.H. 1874. A whaling cruise to Baffin's Bay and the Gulf of Boothis. London, S. Low. Marston, Lolo. Searut (xxiv). pp. 319.
- McDonald, A. 1841. A narrative of some passages in the history of Eenoolooapik, a young Esquimaux, who was brought to Britain in 1839 in the ship "Neptune" of Aberdeen: an account of the discovery of Hogarth's Sound. Edinburgh, Fraser and Co.
- Millward, A.E. 1930. Southern Baffin Island: An Account of Exploration, Investigation and Settlement During the Past Fifty Years. King's Printer, Ottawa.
- Outerbridge, J. 1969. My voyage to Cumberland Inlet. Atlantic Advocate, LIX (8):50-68.
- Phillips, C. 1980. Historical Archaeological Survey, Auguittuq National Park and Vicinity, Parks Canada.
- Purdy, A.W. 1966. North of summer; Arctic poems and prose. The Beaver 297(1) 18-27.
- Reeves, R.R. and E. Mitchell, 1981. White Whale Hunting in Cumberland Sound. The Beaver, Winter 1981, pp. 42-49.
- Reeves, R.R. et al. 1983. Distribution and Migration of Bowhead Whale. Arctic vol. 36(1) March '83, pp. 5-64.
- Rosie 1924. Logbook of the Rosie of Bideford from Peterhead towards Baffin Land, June to October, 1924. Logbook.
- Rosie 1925. Motor ketch Rosie, voyage III from Peterhead to Baffin Land, June-October, 1925. Logbook.
- Ross, J.C. 1837. On the expediency of a settlement on the western shore of Davis Strait. Nautical Mag. 6:165-167.
- Ross G.W. 1981 Whaling, Inuit and the Arctic Islands, in A Century of Canada's Arctic Islands, 1880-1980. pub'd by The Royal Society of Canada, 2nd Symposium, ed. Morris Zaslow.
- Ross, G.W. 1975. Whaling and Eskimos: Hudson Bay 1960-1915. National Museums of Canada, Ottawa, Publications in Ethology, No. 10.
- Ross, G.W. 1978. The Annual Catch of Greenland (Bowhead) Whales in Waters North of Canada, 1719-1915: A Preliminary Compilation. Arctic vol. 32(2), pp. 91-121.

- Ross, G.W. 1978. Summary Report of Activities in Cumberland Sound, Baffin Island, N.W.T., 1976.
- Savours, A. (ed.) 1960. Journal of a whaling voyage from Dundee to Davis Strait. Polar Record, 10 (65):126-137.
- Sergeant, D. 1962. The biology and hunting of beluga or white whales in the Canadian Arctic. Fish Res. Bd. of Cda., Arctic Unit, Circ. No. 8, Montreal.
- Scoresby, W. 1820. An account of the Arctic regions with a history and description of Northern whale-fishery. Jun. Edinburgh, A. Constable & Co. 2:(551) viii 574 p.
- Seduisante. 1910-12. Log of schooner 'Seduisante' Dundee to Baffin Bay and back to Dundee, 1910. Newsp. clip. from Times (London) Nov. 6, 1912 regarding the wreck and loss of the ship posted in logbook.
- Smith, C.E. 1922. From the deep of the sea; being the diary of the late Charles Edward Smith, M.B.C.S., Surgeon of the whaleship Diana of Hull. London, A. & C. Black Ltd.
- Southwell, T. 1883. Notes on the seal and whale fishing of 1881. Nat. Hist. Soc. of Glasgow Proc. Feb. 1882 5:215-21.
- Stackpole, R.A. 1969. American Whaling in Hudson's Bay 1861-1919. Mystic Conn., Munson, Institute of American Marine History.
- Starbuck, A. 1878. History of the American Whale Fishery from its Earliest Inception to the Year 1876. Washington, Government Printing Office (Report of the U.S. Commission on Fish and Fisheries, Part IV). Reprinted by Argosy-Antiquarian.
- Stevenson, M. 1983. A Brief Statement on the History and Significance of the Kekerten Whaling Station. PWNHC, unpublished report.
- Stevenson, M. 1983. Preliminary Summary Report of Kekerten/Usualak Field Projects, Cumberland Sound, Baffin Island. PWNHC, unpublished report.
- Tolley, C. 1978. A History of Contact Between the Inuit of Northwestern Hudson Bay and White Society, Parks Canada.
- Tyson, G.E. 1879. The cruise of the Florence, or, Extracts from the journal of the preliminary Arctic expedition of 1877-78. H.W. Howgate (ed). Wash. D.C., James J. Chapman.
- U.S. Naval Observers, 1946. Report on Eastern Arctic patrol of R.M.S. Nascopie. Office Report.
- Van Beneden, P.J. 1879. Un mot sur la peche de la baleine les Premires expeditions Arctiques. Ac. Roy. de Belgique Bull. Ser. 2-46.

- Vera. 1920. Logbook of the auxiliary schooner Vera of London on a voyage from Ackbuctoo, south side of Kater, Baffin Island to Peterhead, 9 October, 1920 to 11 November, 1920, Opr. by the Sabellum Trad. Co., with T.J. Fletcher, Master. Logbook.
- Walker, A.B. 1969. The cruise of the Esonimaux [sic] to Davis Strait and Baffin Bay, April-October, 1899. Notes from the diary. Liverpool. 101 pp.
- Wakeham, W. 1898. Report of the Expedition to Hudson Bay and Cumberland Gulf in the Steamship "Diana" Under the Command of William Wakeham in the Year 1897. Ottawa, Queen's Printer.
- Wareham, M. 1843. Appendix to Captain Becher's paper North Umberland Inlet; An extract from the journal of a whaling voyage. Roy. Geog. Soc. Jour. 12:(1842) 21-28.
- Warmow, M. Extracts from Br.M. Warmow's journal of his residence in Cumberland Inlet, during the winter of 1857-1858. Periodical Accounts Relating to the Missions of the Church of the United Brethren Established Among the Heathen. 1849, XIX; 1851-53, XX; 1853, XXI; 1856, XXI; 1856, XXII; 1858, XXIII.

Ussualuk Whaling Station

It is recommended that Ussualuk whaling station not be developed as a tourism project.

Kekerten was the focus of eastern Arctic whaling between 1850 and 1880. Later Blacklead became the more important site. Ussualuk was operated by the Arctic Gold Exploration Syndicate between 1918 and 1923 after which it was run by the Hudson's Bay Company as a sub-post of Pangnirtung until 1933. It is not known how long after 1933 people continued to live at the site.

The PWNHC team felt that Ussualuk was a very minor operation. There were several dwelling features and a handful of graves. There were three large vats, a drum, two fireplaces and several barrel hoops. There was a very small amount of whale blubber scum around the working area of the site. This was in contrast to the thick black scum seen in great quantities at Kekerten and even at the HBC whaling station in Pangnirtung. There did seem to be a lot of hand tools in the main area of settlement. An early 20th century movie projector, many parts of musical instruments and a fragment of a porcelain doll were found.

Fig. 33 shows the location of Ussualuk and Figs. 34 to 37 illustrate the site and main features.

The Ussualuk site will not be able to show the effect of the Euro-American whalers on the traditional Inuit way of life to the same degree as Kekerten. It is too small and too recent. If money is to be spent on the development of an historic whaling station for tourism, it should be spent at Kekerten. It can be used more effectively there. If development at Kekerten isn't pursued whole-heartedly (by devoting resources to Ussualuk) then Kekerten probably shouldn't be developed.

In fact, an effort should be made to keep visitors away from Ussualuk. The artifacts there are not covered by thick sod, unlike Kekerten, and they can be easily disturbed or removed.

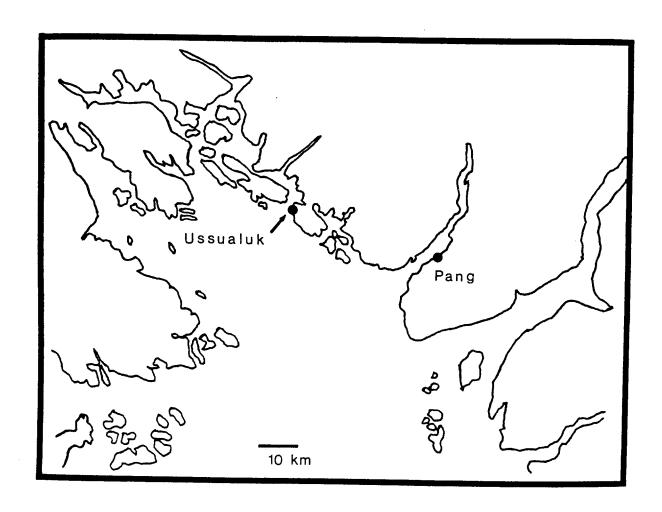


Fig. 33. Map of location of Ussualuk whaling station.

į

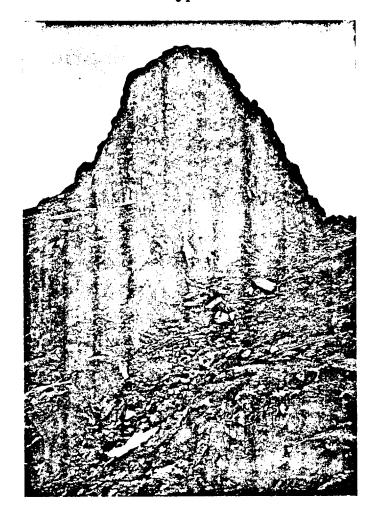


Fig. 34. Ussualuk Mountain.

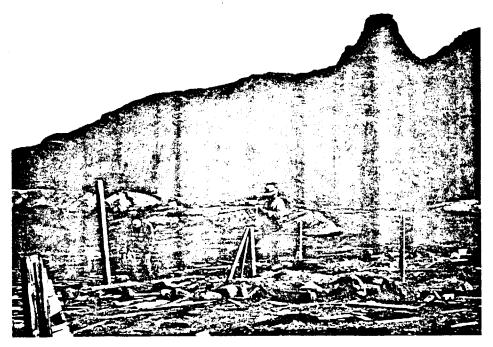


Fig. 35. Archeologists examining artifacts in area of main dwelling.

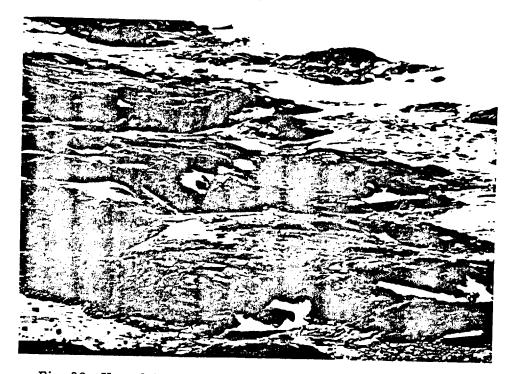
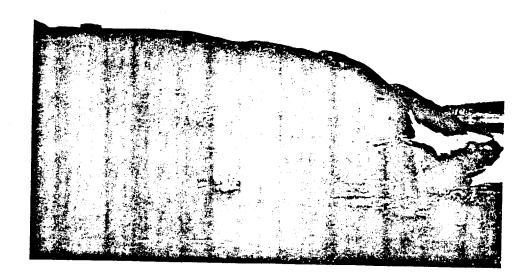


Fig. 36. Ussualuk whaling station site as seen from Ussualuk Mountain.



PART VI AULATSIVIKJUAQ: GLACIATION TRAIL

The objective of the proposed Aulatsivikjuaq Trail is to introduce the visitor to two related branches of physical geography: glaciology and geomorphology. The vehicle will be some of the most spectacular scenery the majority of visitors will have ever seen. Most landforms associated with glaciation can be viewed from the top of Aulatsivikjuaq and from vantage points further up the Aulatsivikjuaq river valley.

For those visitors to Pangnirtung who are not mountaineering enthusiasts and are not prepared to hike for a week through Auyuittuq, the Aulatsivikjuaq Trail will offer a first-rate alternative. It is a flexible combination of two campsites, three viewing sites, two main trails and three potential side trips. All sites are within a half to a full days walk from the landing point.

Overview of the Sites

The following map reveals the proposed sites, Fig. 38. Site A is the first campsite, Fig. 39. It is located on a flat plain to the east of Aulatsivikjuaq adjacent to the boat landing point. There are innumerable places for tenting platforms on this plain and water is available in small pools in the tundra. However, toilet facilities must be provided as the water supply is easily contaminated. Two ponds half way to the top of Aulatsivikjuaq may be an alternative water source.

Site B is the first proposed viewing site. It is located at the top of Aulatsivikjuaq. The following photographs give an idea of the view from Site B, Figs. 40-45. The old Hudson's Bay Co. cabin at the base of Moon Peak valley is visible with binoculars, Site C. Moon Peak valley itself is a good example of a hanging valley (a glacier-formed valley emptying into a fiord). The glacier at the head of Moon Peak valley seen on aerial maps is not visible from the top of Aulatsivikjuaq.

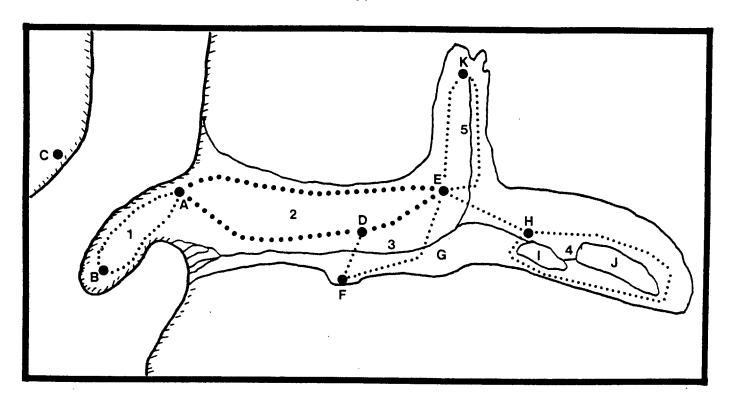


Fig. 38. Map of the proposed Aulatsivikjuaq Trails, campsites and viewing points.

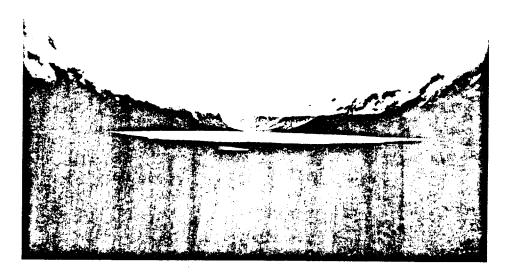


Fig. 39. Camping Site A near boat landing point.

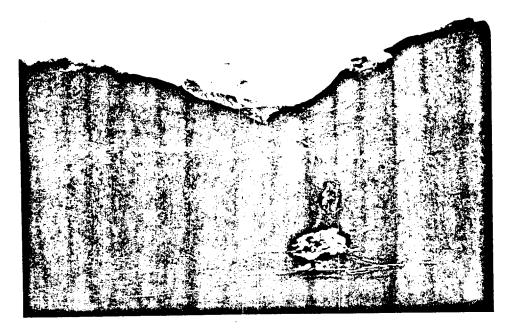


Fig. 40. Moon Peak Valley as seen from the top of Aulatsivikjuaq.



Fig. 41. The old HBC cabin at the base of Moon Peak Valley.

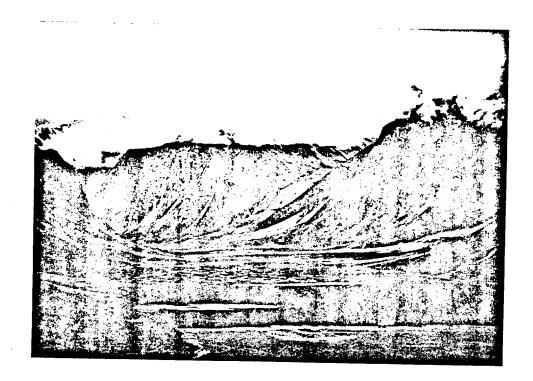


Fig. 42. The view of Overlord and the entrance to Auyuittuq National Park from the top of Aulatsivikjuaq.

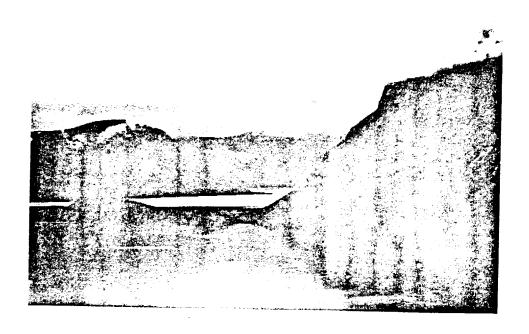


Fig. 43. The view down Pangnirtung Fiord from the top of Aulatsivikjuaq.

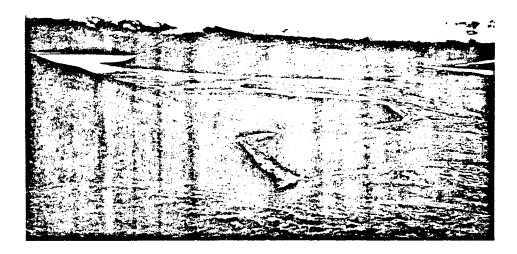


Fig. 44. Aulatsivikjuaq. Note the humpback nature of the hill.

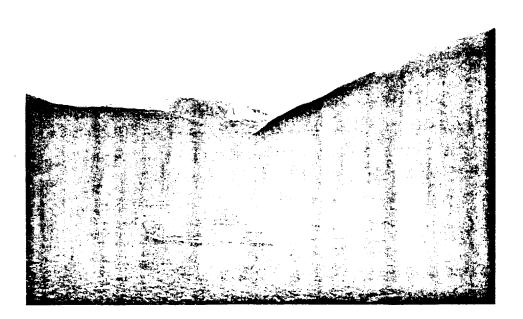


Fig. 45. View of Aulatsivikjuaq river valley from the top of Aulatsivikjuaq.

The old HBC cabin doesn't contribute to the central theme of physical geography but is one of those points of interest along a trail or trip which requires some discussion.

The walk from Site A to Site B is uphill and takes about one hour. With good weather most visitors would be tempted to spent at least an hour at the top of Aulatsivikjuaq. Whether an actual trail is built with inukshuks or not, an accompanying brochure should suggest that the visitor take a circular route to the top as marked on the map (Fig. 38). We will refer to this as Trail 1.

There are two other sub-themes to be dealt with at the top of Aulatsivikjuaq. The site is ideal for a discussion of the formation of Pangnirtung Fiord, the history of glaciation on Baffin Island and the existence of current icefields on the Island. Second, the formation of Aulatsivikjuaq is an interesting question in geomorphology.

Falcons do not contribute to the central theme anymore than the old HBC cabin does. Yet, in the course of fieldwork during the summer of 1983 one or two falcons were regularly on patrol overhead and consideration should be given to including a brief mention in the brochure of the life history of the gyrfalcon; perhaps from the perspective of glacially formed physical features and the requirements of safe breeding sites.

For the average visitor the hike to the top of Aulatsivikjuaq and back (Trail 1) would take half a day. The circular route from Site A to the viewing sites at D and E and back to A would take a day (5-6 hours). Neither route is arduous. Although they are largely uphill walks the elevations reached are not comparable to the Ikuvik Trail for example.

This route, which we will call Trail 2, is similar to the circular route depicted in the MMM study. The uphill portion follows the top of the river gorge to viewing Site D from which the cirque glacier and hanging valley at F can be best seen. It is recommended that Trail 2 be marked with inukshuks because one could easily follow the river itself and arrive at the large low lying plain at G; from which little can be seen. There are at least two ridges in the vicinity of D which could serve as resting and viewing sites for Site F.

From Site D the trail swings to the east following the high ground to Site E. From E one has an excellent view further up the main river valley to H. H is a good example of a terminal moraine holding back a glacial lake (I). Lake J cannot be seen. A side trip from D can be taken to glacier F (Trail 3).

The MMM study suggested a circular trail around Lakes I and J. This trail was supposed to follow a trail up the slopes to the south of plain G. This route is impractical for the average visitor. It is too steep and rough. From a distance it appears more difficult than the Ikuvik Trail. It would be preferable if a side trip, Trail 4, continued up the main river valley to the terminal moraine H. At that point, the trail could continue in a loop around one or both of Lakes I and J although the terrain was not observed during the fieldwork of 1983. We will call this Trail 4.

From Site E a side trip can be made up the second river valley to the two glaciers and the lake at the far end, Site K. A looped trail up this valley will be called Trail 5.

Site E is the second proposed campsite. Visitors could camp there near the river and go on the side trips, Trails 3, 4 and 5.

The Problem With Names

At this point, the problem with place-names should be discussed. In any development of the Aulatsikikjuaq trails it is suggested that appropriate names be found for the rivers, streams, mountains, peaks, valleys, glaciers and lakes in the area. If the Inuktitut names exist they should be collected with proper spellings and translations. If they do not, then a place-name committee or sub-committee should be formed with individuals from the Tourism Committee, the Hunters and Trappers Association and the elder's society. Apparently it is the policy of Parks Canada to leave many of the glaciers and peaks in Auyuittuq unnamed so as to increase the perception of wilderness.

It is suggested that this policy not be adopted for the following reasons:

(1) There is no indication that the lack of names does anything to increase the sense of wilderness. The top of Mt. Everest is wild and untamed with or without a name;

- (2) Human beings are programmed to name things. In the case of Auyuittuq, if PC doesn't name features, one can be sure that names will appear in the alpine literature anyway. Many peaks along Pangnirtung Pass have names of Norse Gods instead of local Inuktitut names this happened by default;
- (3) The Tourism Committee doesn't have a mandate to preserve wilderness but to develop tourism; and
- (4) The lack of place-names becomes awkward when developing interpretive vehicles. It inhibits the sharing of the wilderness experience ("you will note the fine example of an arete to the left of the cirque glacier being the first glacier visible on the west wall of the valley as you proceed up the valley from the fiord...").

To preserve names chosen by the proposed place-name committee, the committee should get in touch with the federal place-name entity in Ottawa which will (presumably) ratify the local decisions.

Brochure

It is recommended that a brochure be prepared for the Aulatsivikjuaq Trails. Maps similar to Figs. 38 and 50 should be included. The accompanying text should not be site specific, ("at inukshuk #x you can see..."), but rather a general discussion of the formation of glacial and post-glacial features would be better suited. This is because more than one example of many features are available. While further fieldwork at sites F, H and K would delineate further features and the option remains to make the brochure site specific, a generalized brochure could be used throughout the area. This does not mean that specific features would not be designated on a map or portrayed in the brochure via sketch or photograph. If an interpretive sketch of glacial features is to be used (and it should) it should represent a scene which can be viewed along the trail.

Glaciology and Geomorphology

The flat plain below Aulatsivikjuaq, the site of the proposed campground, is one of four shoreline areas of Pangnirtung Fiord which is composed of emerged marine sediment with accumulations of deltaic gravel, sand and silt. The plain was formed

during several periods of higher relative sea level when the earth's crust was depressed by glacier ice. Considering the mountainous topography of the whole area, the existence of such an obvious plain requires some explanation to the visitor.

Aulatsivikjuaq itself is an outcrop of ice-molded bedrock similar to Aulatsivik and Kunguk. One geologist has referred to it as a reigal which is a "step" in the floor of a glacially formed valley. This formation may be created by the processes depicted in Fig. 46, which is called the "selective quarrying" or "rock-competence" hypothesis. There are three other major hypotheses explaining glacial stepping.

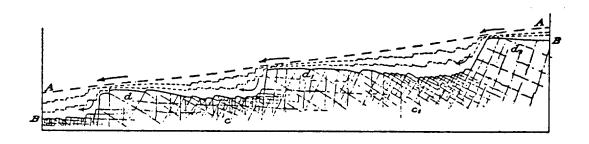


Fig. 46. Glacial stepping in fiords. Longitudinal section of a canyon illustrating the mode of development of a glacial stairway by selective quarrying. AA represents the profile of the preglacial canyon floor; BB that of the glacial stairway. Bodies of closely jointed rock, such as c and c₁, are readily quarried out by the glacier, but bodies of sparsely jointed, unquarriable rock, such as d and d₁, are very difficult to erode. Competent rock like this is reducible only by abrasion, and remains standing as obstructions with flattened and smoothed tops and steep, more or less hackled fronts. The broken lines indicate successive stages in the development of the steps and treads. The arrows indicate the direction of ice movement (Matthes, 1930).

This interpretation of the origin of Aulatsivikjuaq may not be correct. It was based on earlier work which did not even include Aulatsivikjuaq on an accompanying diagram showing a longitudinal section of Pangnirtung fiord, Fig. 47. This section at first blush does seem to show a series of "steps" down the fiord but it actually misrepresents the "dome" nature of Aulatsivikjuaq, Aulatsivik and Kunguk. Unless a depth map shows the floor of Pangnirtung fiord to be raised in a "step" beside Aulatsivikjuaq, a simpler explanation would be that Aulatsivikjuaq is a classic "rouche moutonnee", the creation of which is depicted in Fig. 48. See Fig. 44 for profile of Aulatsivikjuaq.

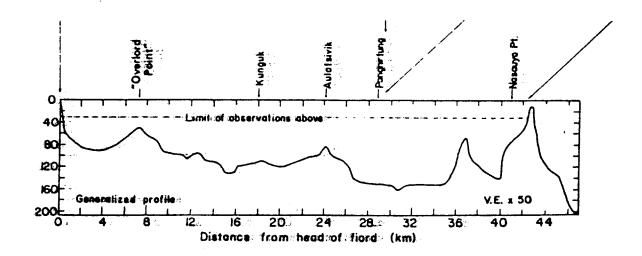


Fig. 47. Long profile of Pangnirtung Fiord suggesting peninsulas are associated with ridges in the profile (after Gilbert, 1978).

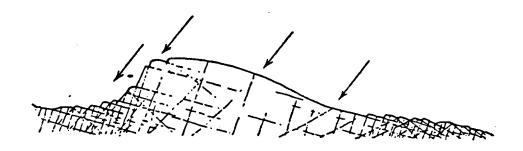


Fig. 48. Formation of a rouche moutonnee. Longitudinal section of a typical roche moutonnee fashioned by a glacier from an obdurate mass of sparsely jointed granite. The glacier moved from right to left and exerted its force in the direction indicated approximately by the arrows - that is, at a high angle against the back and crown of the hump but at a slight angle away from the downstream face. It consequently subjected the back and crown to vigorous abrasion, leaving them smoothed and gently curved, and it subjected the downstream face to quarrying mainly, leaving it hackled and abrupt. If glaciation had continued until all of the jointed, quarriable rock had been removed from the downstream side, there would have resulted an asymmetric dome, smoothed on all sides but steeper on the downstream side than on the upstream side (from Matthes, 1930).

Such a rouche moutonnee would arise where the bedrock is not easily fractured. The glacier(s) which formed Pangnirtung Fiord would have removed the more easily fractured bedrock material from both ends of Aulatsivikjuaq and would have smoothed the surface of Aulatsivikjuaq itself.

An examination of a map of eastern Baffin Island suggests that formations such as Aulatsivikjuaq, Aulatsivik and Kunguk are rather unusual. One also notes that the form of Pangnirtung Fiord has "bends" or "elbows" at each of these formations. The original river valley down which the glacier(s) came to form the fiord may have bent around the rock precursors of these formations and/or the path of the glacier(s) was directed by the rock precursors.

The available geological and geographical literature will have to be closely examined to arrive at the best interpretation of the formation of Aulatsivikjuaq.

There are two other points of interest along the path to the top of Aulatsivikjuaq. There are several fine examples of ventifacts or rocks formed by the action of sand and snow laden high winds. A couple of these are spectacular; crystalline orange boulders hollowed out by the wind. Second, there is a good example of periglacial activity in the form of tundra polygons, Fig. 49. A large body of literature exists on the formation of these polygons.



Fig. 49. Tundra polygons at Aulatsivikjuaq.

was allowed for a

The mouth of the Aulatsivikjuaq river is a classic fan-shaped delta with numerous channels crossing a broad plain and extensive intertidal zone. It can best be viewed from the top of Aulatsivikjuaq.

Considering now the valleys through which any trails will be routed, they can be pictured as an inverted T as in Fig. 50.

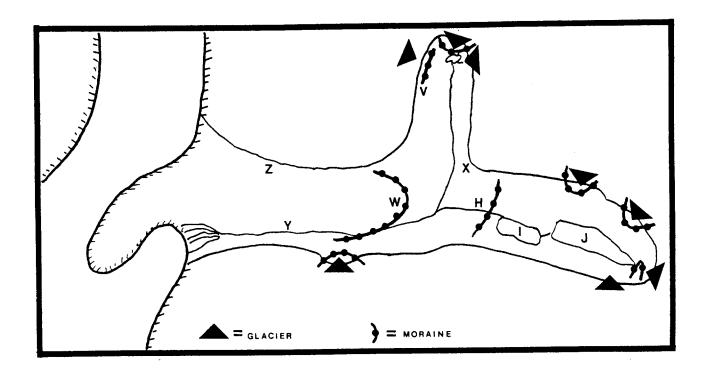


Fig. 50. Glacial and geomorphological features of the Aulatsivikjuaq river valleys.

The valley represented by the base of the inverted T is 13 kilometres long. At the far end from Aulatsivikjuaq there are two lakes, I and J, Fig. 50. The valley running parallel to Pangnirtung Fiord is about 8 kilometres long. At the far end of this valley is a small lake. These two valleys are composed of till or ground moraine; sand and gravel with numerous small outcrops of ice-molded bedrock.

Point X in Fig. 50 is a right angle cliff with a base of colluvium (scree); extensive accumulations of blocks averaging 0.5 to 1.5 metres in diameter. Fig. 51 shows the two valleys, the lakes, rivers and their tributaries and some of the glaciers in the area.



Fig. 51. Aerial photograph of river valleys.

There are at least 7 ridges of end and lateral moraines in the valleys. They are composed of till and are commonly 20 to 30 metres thick. Many of these are likely unstable and underlain by stagnant glacier ice, particularly where near active glaciers.

There are 7 or 8 glaciers which line the perimeters of the two valleys. This compares with about 40 glaciers which line both sides of the Pangnirtung Pass in Auyuittuq. Fig. 52 shows the glaciers at the far end of the valley running parallel to Pangnirtung Fiord. Fig. 53 is an enlargement of an aerial photograph. It reveals the size and location of the glaciers and lakes at the far end of the valley.

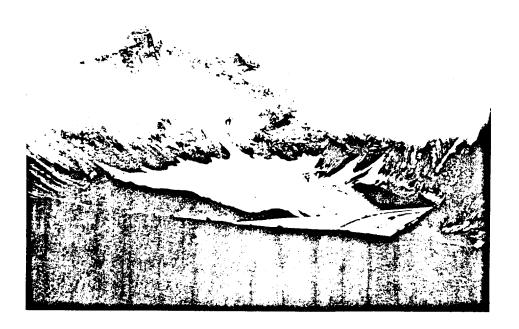


Fig. 52. Glaciers at the end of the valley running parallel to Pangnirtung Fiord.



Fig. 53. Enlargement of an aerial photograph showing the glaciers seen at ground level in Fig. 52.

All three of the lakes in the two valleys drain into the river which flows into Pangnirtung Fiord at Aulatsivikjuaq. The main river runs the whole 13 kilometres of the valley represented by the base of the inverted T in Fig. 50. There are about 15 streams which are tributaries of this main river, most of which originate at the base of glaciers.

Glacier-fed streams are typically burdened with sediment. One result of this is the formation of "braided streams" on valley floors. A classic example of this occurs at the western side of the intersection of the two valleys, Fig. 54.

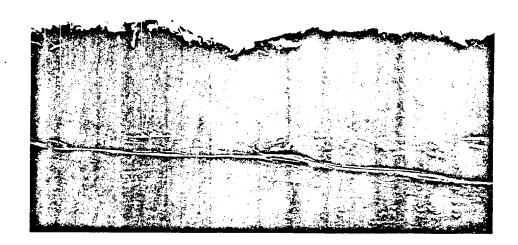


Fig. 54. Braided streams, Aulatsivikjuaq river.

In contrast to the braided streams, the main river cuts through the bedrock in a couple of small waterfalls at point Y in Fig. 50 as represented in the following photo, Fig. 55.



Fig. 55. Waterfall on Aulatsivikjuaq river.

An interesting riparian formation can be seen on the return portion of the proposed trail, point Z in Fig. 50. The trail would cross a stream sluicing down a 50 metre stretch of steep polished bedrock. The "waterslide" is not only beautiful but it is a good example of how thin the surficial deposits are in the area and what a "new" stream looks like prior to incision of the bedrock by water action.

As for representative moraines, most of the primary trail loop passes around the perimeter of a large moraine lying across the main river valley, as shown by point W on Fig. 50. However it is difficult to see the giant when standing on his nose.

More obvious is the terminal or push moraine in front of the edge of the glacier at point F on Fig. 50. It would be interesting to know if there is a small glacial lake between this moraine and the glacier.

The glacial lake, point I on Fig. 50, seen in photograph Fig. 56 appears to be blocked by a cross-valley moraine through which the main river has cut a channel.

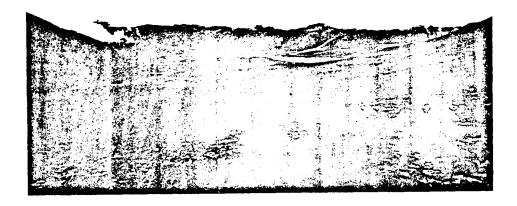


Fig. 56. Glacial lake behind moraine, main river valley.

The moraine at point V on Fig. 50 is likely classified as a lateral moraine.

The mountain peaks were clouded over during most of the time spent in the field. While they were not localized on the map, Fig. 50, it was obvious that there were many glacial forms such as aretes, horns, circues and bergschrunds. Fig. 57 explains how these features are formed.

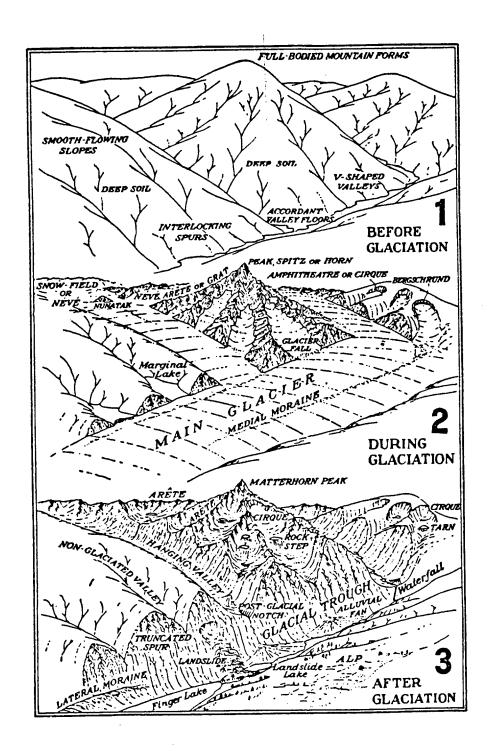


Fig. 57. Diagram of formation of glacial features. From Lobeck, 1939.

The question arises how the two valleys were formed. Perhaps a clue is the right-angled cliff, point X in Fig. 50, and shown in photograph Fig. 58. This may be an example of "glacial breaching", a process shown in Fig. 59. However, this would require an arm of a glacier moving primarily along one valley branching off into the other valley. This would explain the form of point X. However it would be expected that a "step" or ridge would remain after the main glacier "breached" its walls. This is seen in Fig. 59.

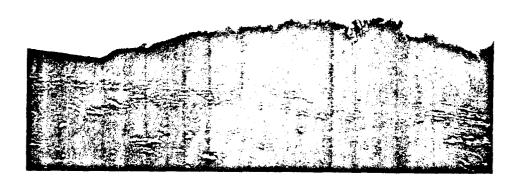


Fig. 58. Right angled cliff at junction of two valleys.

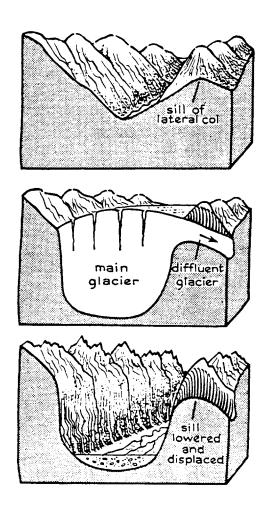


Fig. 59. Evolution of a glacial breach. From Fairbridge, 1968.

A more likely explanation is that there were two river valleys prior to glaciation and the eight or so current glaciers (and their precursors) along the current valleys supplied two glaciers which merged to flow into Pangnirtung Fiord. Which ever explanation, it seems obvious that the two valleys have glacial origins as they both conform to the typical U-shape of a glacially formed valley. When a topographical map of the entire area is viewed the first explanation might be supported by the existence of a valley going all the way to Kingnait Fiord from the far end of the main river valley. This will have to be investigated.

The following are some formations and processes which may be interpreted for the visitor.

Formations

cirque
cirque glacier
bergschrund
arete
horn
hanging valley
cirque lake
nunatak
ventifacts
braided streams
eskers
kames
kettle lake

u-shaped valley
fiord
riegal or rouche moutonee
(glacial steps)
medial moraines
end moraines
lateral moraines
cross valley moraine
outwash plain
sandurs
raised beach
drumlins

Processes

abrasion plucking crevasse filling breaching erosion

Development of Aulatsivikjuaq

As suggested supra, there ought to be a second campsite located at the junction between the two valleys (Site E, Fig. 38). The reasons are numerous. The MMM study suggested an overnight trail although it was not indicated where a suitable site might be. Perhaps it was contemplated that people would chose their own site. That continues to be a planning option. It would take 3-4 hours for the average visitor to get to point E. It takes only 1-1/2 hours to go back downhill to Pangnirtung Fiord. That is a good day-trip for most people. That is one recommended activity - as the proposed Trail 2. To get closer to the glaciers and to travel further up the two valleys, would be something only the very fit hiker would find enjoyable. A visitor could easily get off the boat and hike to point E to set up camp and from there have three trails to choose from:

(1) a day trip up the shorter valley to site K (Fig. 38);

- (2) a one or two day trip up the main valley to the first or second of the two lakes;
- (3) a shorter trip to the cirque glacier at site F, (Fig. 38).

A party of visitors could easily have a 1 to 5 day trip to Aulatsivikjuaq with sufficient flexibility to satisfy a variety of individuals. Ray Brenamen of Parks Canada can recall only one party which went up the Aulatsivikjuaq valley as opposed to going into Auyuittuq. They had a good trip by all accounts. The point is that for the atypical visitor who is a mountain climber, there is great opportunity for exploratory trips of a more arduous kind to the various peaks along the valleys (including opportunities for "peak-baggers" as British climbers so quaintly describe them).

There is flat land with an ample number of sites for tenting platforms at site A. As well, water is obviously not a problem. An outhouse with a honeybag or a chemical toilet is not impractical. Consideration might be given to an inconspicuous outhouse with a pit. However, we have no information as to depth of till. Moreover, the till might be too granular to maintain a pit form.

What would be the cost of materials for Campsite A? A 12 feet by 12 feet tenting platform is made of 30 1" x 6" planks and 11 2" x 6" supporting beams. In Toronto, Rio Lumber at 119 Merton Street, (416) 485-1125, sells 1" x 6" planks at \$0.24 a foot and 2" x 6" beams at \$0.43 a foot. The wood is spruce. Total cost for wood for one platform is \$153.18 including tax. Rio charges \$15.00 for delivery to the airport. Doubling the cost to include airfreight is about \$322.00. Adding the cost of screws and rings (to secure the tent ropes) and a safety margin the approximate cost might be \$450.00 per platform.

Portable 23 1 chemical toilets with a 12 1 flushing tank (filled by hand) are about \$112.00 including tax at Canadian Tire, 9 Carrier Drive, Rexdale, (near the Toronto airport), (416) 745-9070. A \$10.00 delivery charge to the airport brings the cost to \$122.00. Doubling for airfreight makes the cost of a toilet \$244.00.

The cost of a small wooden outhouse building for the toilet (is it really necessary?) would be about the same as a tenting platform.

Three tenting platforms, a toilet and an outhouse at each of Campsites A and E would cost a total of about \$2,750.00 for materials.

A rough rule of thumb in construction is that labour costs approximately equal material costs. Total cost would be \$5,500.00.

It is hard to estimate the amount of time it takes to build trails. A trail crew of 3 should spend a month at the site for the trails alone. Wages, transportation (2 trips a week) and food would total \$6,500.00 (\$4,000.00, \$1,000.00 and \$1,500.00 respectively).

The length of time in the field and the substantial nature of the proposed brochure would make the fee of the summer consultant \$3,000.00.

The grand total to develop the site in 1984 would be about \$15,000.00.

Outfitting

Aulatsivikjuaq is 4/5 of the way to Auyuittuq. The following schedule is recommended:

Visitors	Price	
1,2	\$75.00	
3	90.00	
4	105.00	
5	120.00	
6	135.00	

Recommendations

- (1) Development of Aulatsivikjuaq as a visitation site should proceed expeditiously. It is admirably suited for the development of glacial and geomorphological themes.
- (2) During the summer of 1984 a draft brochure should be developed from the glaciology and geomorphology concepts discussed above. It should not be site specific.
- (3) A trail crew of three should spend 6 weeks at the site building the two campsites and the five trails during the summer of 1984.

Bibliography

The following are useful textbooks on glaciology, periglaciology and geomorphology. In addition, there are over 300 articles on the physical geography of Baffin Island in the 3 volume annotated literature review for Auyuittuq National Park kept at the Parks Canada office in Pangnirtung. Many of these articles deal specifically with the area around Pangnirtung.

- Lobeck, A.K. 1939. Geomorphology. New York: McGraw-Hill Book Co., 731 pp.
- Fairbridge, R.W. 1968. The Encyclopedia of Geomorphology. New York: Reinhold Book Corporation, 1295 pp.
- Matthes, F.E. 1930. "Geologic History of the Yosemite Valley", U.S. Geol. Surv., Profess. Paper 160, 135 pp.
- Embleton, C. and C.A.M. King, 1975. Glacial Geomorphology. 2nd ed., vol. 1, London: Edward Arnold (Publishers) Ltd., 573 pp.
- Garner, H.F. 1974. The Origin of Landscapes: A synthesis of Geomorphology. Toronto: Oxford University Press, 734 pp.
- Pitty, A.F. 1971. Introduction to Geomorphology. London: Methuen & Co. Ltd., 526 pp.
- Small, R.J. 1978. The Study of Landforms: A Textbook of Geomorphology, 2nd ed., New York, Cambridge University Press, 502 pp.
- Ritter, D.F. 1978. Process Geomorphology. Dubuque: Wm. C. Brown Co. Publishers, 603 pp.
- Rice, R.J. 1977. Fundamentals of Geomorphology. New York: Longman, 387 pp.
- Derbyshire, E., K.J. Gregory and J.R. Hails, 1979. Geomorphological Processes. Folkestone: Dawson Westview Press, 312 pp.
- McCullagh, P. 1978. Modern Concepts in Geomorphology. Oxford: Oxford University Press, 128 pp.
- King, C.A.M. 1966. Techniques in Geomorphology. London: Edward Arnold (Publishers) Ltd., 342 pp.
- Nelson, J.G. and M.J. Chambers, (eds.) 1969. Geomorphology: Selected Readings.
 Toronto: Methuen Publications, 399 pp.
- King, C.A.M. (ed.), 1976. <u>Periglacial Processes</u>. Stroudsburg, Penn.: Dowden, Hutchinson & Ross, Inc., 459 pp.

- Brown, R.J.E. and W.O. Kupsch, 1974. Permafrost Terminology. Altona, Man.: D.W. Friesen & Sons Ltd., 62 pp.
- Washburn, A.L. 1973. <u>Periglacial Processes and Environments</u>. London: Edward Arnold (Publishers) Ltd., 320 pp.
- Bailey, R.H. 1982. Glacier. Alexandria, Va.: Time-Life Books., 176 pp.

PART VII INUGUARULUK: CHAR FISHING ACTIVITY

The objective of this activity is to provide visitors with an opportunity to fish for Arctic Char. In 1981 30% of the visitors to Pangnirtung did fish while 30% indicated a desire to fish but didn't.

Currently private fishing camps operate at Clearwater and Kingnait Fiords. The clientele of these two camps come to the area with fishing as their primary goal. A visitor may arrange with an outfitter to go to any suitable fishing site such as the mouth of the Koolik River. Concern has been expressed in the community that such unorganized visitor fishing activity conflicts with local fishing. The char fishing activity organized under the Tourism Plan would focus on the visitor who has not come to the area primarily to fish and would involve use of a designated site not in conflict with local needs.

Discussions between the Tourism Committee and the Hunters & Trappers Association prior to the summer of 1983 resulted in the designation of such a site on Cumberland Sound known as Inuguaruluk, or "place of human figure". The spelling of the name is in doubt as several versions were encountered. Inuguaruluk derives its name from a column of rock at the site which at a distance resembles a human figure.

Description of the Site

Inuguaruluk is on the east side of Cumberland Sound, 5 kilometres from Nasauya Point and 18 kilometres from Pangnirtung by boat, Fig. 60. Depending on the weather an average boat trip to the site takes 1 hour and 15 minutes. Fig. 61 is reproduced from an aerial photograph and shows the location and topography of the site.

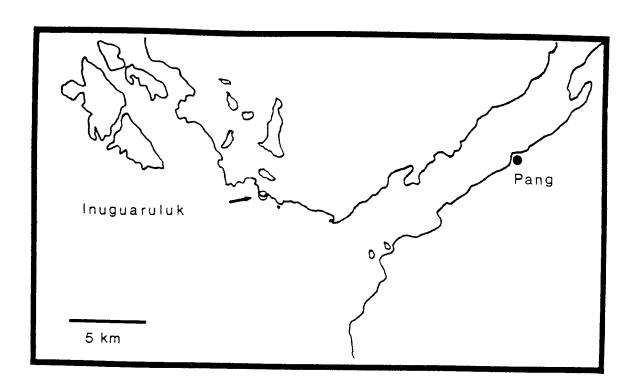


Fig. 60. Location of Inuguaruluk on Cumberland Sound.



Fig. 61. Enlargement from an aerial photograph. Nasauya Point is at the upper end of the picture. The fishing site is marked.

The site has a sand and gravel beach sheltered by a granite point. The beach extends upland parallel to the shoreline and transforms to a tundra and sand patched slope, Fig. 62.

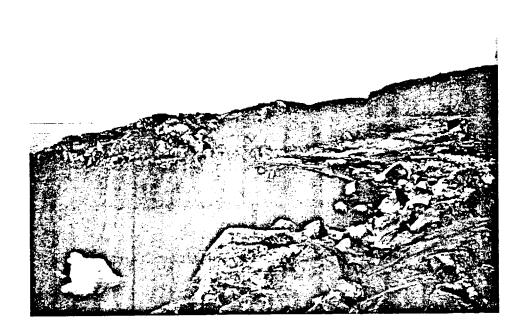


Fig. 62. Photograph of Inuguaruluk beach.

The beach provides an excellent boat landing site. The area was not visited at low tide. The meadow extending from the beach has several small streams of fresh water coursing through it and has dry, flat sites for tenting. The rocky shoreline and upshore bluffs provide shelter from winds. The surrounding rock has many crevices for the location of a chemical toilet or honey bag toilet that would provide privacy. With anything other than minimal use of the site toilet facilities must be provided so as to protect the fresh water sources. The rocks along the shore provide numerous positions for visitors to fish from. Space is not a problem. Apparently the site was used as a fishing camp for several years. The remains of tent sites and fireplaces are evident. So is garbage. At the upper end of the meadow there are large quantities of bilberry, crowberry and bearberry which ripen to fruit in late August.

The rock formation which gives the site its name can be seen on the rock promontory, Fig. 63. It is distinctive and is suitable as the subject of a brochure cover photograph.

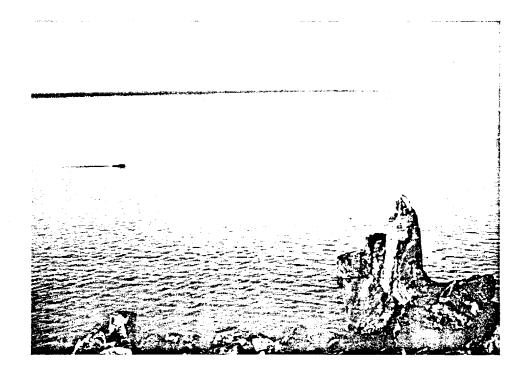


Fig. 63. Photograph of rock formation giving Inuguaruluk its name.

There is at least one human burial at the site. A rock cairn at the upper end of the meadow covers human remains. There are reputed to be other graves. In any brochure their presence should be noted and warnings about their disturbance given. Not every visitor would recognize a grave cairn for what it is.

A visitor perched on a high rock has a good view of the Sound and can readily see seals, gulls, eiders, loons, shearwaters, ravens, sandpipers and possibly whales or walruses.

There is reputedly a Thule site several hundred meters to the north of the site. The topography is suitable for short hikes inland.

A return boat trip could pass by Upajanna Island. There is a cross on the island which marks the scattering of ashes of a captain who repeatedly visited the area. The site of the traditional summer camp can also be seen on the return trip.

The site is reputedly good for fishing. It is located near at least one river travelled by char and the fish follow the shoreline past the site.

In summary, the chosen site is ideal for use as a fishing site.

Development Plan

The MMM report recommends a day trip with 3 hours at the site. Presumably this means a one-tide trip; to the site and back on one high tide. However, there are three options which could be offered:

- (1) one day same-tide trip;
- (2) one day two-tide trip; and
- (3) overnight trip.

The site is large enough to accommodate overnight camping but the site should not be allowed to become a campground with stays longer than one night. The ground cover is insufficient for heavy traffic.

Other than a straightforward hike across the tundra it is advisable that visitors who are away from the hamlet be accompanied by the outfitter-guide. While the chance of a bear attack may be slim, any trip to the shoreline of the Sound should be prepared for the improbable though possible. For safety's sake, visitors to the fishing site should be accompanied at all times by an armed outfitter-guide.

Another consideration is that any destination with human burials and/or archeological sites (developed or otherwise) should be a "supervised" trip. An outfitter-guide should be present at such sites to ensure that a "look but don't touch" attitude is adopted.

A brochure for the char fishing activity should be developed. This brochure would cover the following:

- (a) a map showing the fishing site and observable places and sites of interest;
- (b) a description of the trip, the site, the options and how to arrange the trip through the Community Host;
- (c) a description and discussion of the ecology, behaviour and reproduction of the Arctic char;
- (d) a more brief description of the birds and sea mammals likely to be seen during the trip;
- (e) general advice as to what to wear, what to bring and what sort of fishing equipment would be most appropriate;
- (f) possibly a couple of recipes or cooking methods for char;
- (g) information concerning fishing licences, quotas and taking fish back home;
- (h) a description, discussion or mention of the Thule site, the Upajanna site and the summer camp site (the latter two to be passed by on the returning boat trip.

The brochure could be entitled "Inuguaruluk - Arctic Char Fishing Trip" and the cover could be a photograph of the Inuguaruluk rock formation with someone standing in front of it with a couple of char.

What materials or supplies would be needed for development? Other than normal outfitting equipment, a portable chemical toilet or portable honey bag toilet should be available at the Visitor Centre for the outfitter to pick up for each trip. If an overnight trip is to be one of the options, two tent platforms should be set up at the site, so as to reduce wear and tear of the ground cover. A picnic table might be provided as well. If only day trips are available the latter two items are unnecessary.

While the rocks along the shore provide sufficient crevices for both a windsheltered area for the stove and a private area for the toilet, permanent sites might be constructed with a few judiciously cemented stones.

The outfitter should be prepared with stove, tea, bannock and soup mix (to season the boiled char) so as to provide a simple lunch. If an overnight trip is planned, the visitors should be advised in the brochure (and verbally) that provision of supper and breakfast is their own responsibility. The visitors should also be advised that provision of camping equipment is their own concern although serious consideration should be given to the erection of a large tent similar to the one in use at the hamlet campground during the summer of 1983. This will open the overnight trip up to those visitors to Pangnirtung who are not campers and hikers and who did not pack a tent in them - although a personal sleeping bag would still be necessary.

What would be a suitable cost for the fishing trip? The following are suggested guidelines:

Person(s)	One day - same tide	One day- two tide	Overnight - three tide
1,2	75	150	200
á	90	170	225
4	105	190	250
5	120	210	275
6	135	230	300

While the cost of gas for the outfitter would be the same if he remained at the site (which is recommended) for each of the three options, the increased price reflects the outfitter's time spent on the trip.

What should be the budgeted development cost for 1984?

Brochure	(a)	contractor's labour	\$	1,000.00
Picnic table (material and labour)			\$	400.00
Two tent platforms (material and labour)			\$	1,800.00
Chemical toilet			\$	250.00
Labour	(a) (b) (c)	to clean up garbage at site to install tent platforms to construct sheltered stove and cement areas for cooking and toilet	\$ \$	75.00 450.00 400.00
Cement, spatulas and water bucket to construct cooking and toilet structures			- <u>\$</u>	300.00 4,675.00

The picnic table would be constructed of 2"x 6" wood, using bolts. This could be purchased from a person at the workshop in Pangnirtung. See the Aulatsivikjuaq plan for the costing of tenting platforms and chemical toilets.

PART VIII RECOMMENDATIONS

1. Continuation of 1983 Projects

(a) Ukama and Ikuvik Trails

The inukshuks along these two trails should be inspected in the spring of 1984. In all likelihood the trail crew will have to do some repairs. The numbering of the inukshuks on the Ukama Trail must be straightened out. Numbers will have to be paint-stencilled on base rocks. The errors in the two brochures should be corrected.

There should be a contract for someone in the workshop in Pangnirtung to build visitor questionnaire boxes and visitor registry boxes to be placed on the two trails.

(b) Nuvoatiakalla Summer Camp

An arrangement should be made with the elders at the Museum to build the equipment necessary for the summer camp. This should be done during the winter of 1983-84. One of the elders should be hired to come out and inspect or supervise the building of the site by the trail crew. Consideration should be given to building both a kamek and tupek at the site. A brochure should be prepared for the activity. This should be done next summer once the site is operating. Early consideration should be given to the conditions under which the camp family will be hired. A chemical toilet should be purchased.

(c) Kekerten

Ussualuk should not be developed. If and only if a proper archeological and historical research programme is commenced at Kekerten should boat tours to the site begin. It is important that elders in Pangnirtung are hired as consultants to the project. Research assistants from Pangnirtung should be hired and trained with a view to being tour guides in the future.

A brief trip was made to the Whaling Museum in New Bedford, Mass. If research continues the research assistants should go to the museum in order to see first hand how historical themes are interpreted. It will also be helpful as it will put the Kekerten project in a wider perspective for them. The museum has extensive displays and a large library which contains over 20,000 volumes (not all on whaling) and over 700 logbooks. Parks Canada has had a researcher there. Before GNWT or PWNHC sends its own researcher the results of Philip Golding's work should be obtained and reviewed so as to avoid duplication of work.

A brochure about life in the settlement at Kekerten should be prepared in 1984. The theme should focus on the questions posed and research undertaken by the research team.

A combined emergency and research shelter should be built at the site. Consideration should be given to the safety precautions suggested in the text. The Hamlet Council should make a specific decision about the site's development. Development should only proceed if a physical anthropologist protects the graves at the site.

(d) Aulatsivikjuaq

Particular emphasis should be given to developing this site. Materials for tenting platforms and toilets should be ordered early in the season. A trail crew of three should spend 6 weeks at the site building the 2 campsites and 5 trails.

It may be that 2 separate trail crews should be hired for the summer of 1984. One would be a "field crew" which would work on Aulatsivikjuaq and the Koolik River Trails (see <u>infra</u>), staying in the field for a week at a time all summer. The other crew should repair the Ukama, Ikuvik and Nuvoatiakalla inukshuks, build the summer camp and the fishing site and assist with the other projects for 1984.

An extensive interpretive brochure with geomorphology as its theme should be prepared during the summer of 1984.

(e) Inuguaruluk

The trail crew should construct tenting platforms, build toilet and cooking areas and clean up the site. Someone should be hired to build a picnic table for the site. Visitors should have a choice of one tide, two tide or an overnight trip to the fishing site.

A brochure on the biology of the arctic char, cooking recipes and points of interest along the trip to and from the site should be prepared in 1984.

2. Brochures

(a) As brochures are developed for the various projects they should be available as a package to be mailed in response to inquiries made by telephone or letter. A conclusion reached by the MMM visitor survey was that lack of information prior to the arrival in Pangnirtung was a major complaint of many visitors. Whether inquiries are made to GNWT at Yellowknife, Frobisher Bay or Pangnirtung, or to Parks Canada or even Peyton Lodge, the same package should be available to be mailed south. A cardboard folder with suitable title and cover photo with an interior pouch in which various brochures, price lists or newsheets could fit could be inserted into any large envelope used by any of the above institutions or organizations.

There may be expensive booklets such as the walking tour of Pangnirtung or a possible one on Arctic wildflowers which a visitor could buy once he or she arrived in Pangnirtung, but even these could be initially mailed free upon inquiry.

(b) Many brochures are thrown away or otherwise never used. But in the absence of well developed visitor centres, museums, audiovisual shows, interpretive hikes and talks, movies and displays, they are one of the cheapest and most effective ways to convey information and stimulate interest in tourism development projects.

Every project should have its own brochure even if it is only a single folded sheet without photographs. Each brochure should have a map (if for a site project) a

description of the objective of the project, a brief discussion of what to expect, what to bring and how to arrange the trip or event. Many brochures should contain supplementary information which may not be directly available during the trip or the event. For example, the brochure for the Nuvoatiakalla summer camp may contain a general history of the changes in settlement patterns and shelter materials and styles since before initial contact between the Inuit and Euro-Americans. Another example might be the brochure for the fishing trip which could contain general information on the ecology, behaviour and reproduction of Arctic char.

- Consideration should also be given to a series of brochures each of which is not site or project specific. For example, a brochure illustrating the common Arctic wildflowers through photographs and with accompanying text discussing identifying characteristics and traditional medicinal, food or material properties is sorely needed. Other brochures could cover birds, marine life and land fauna. This kind of brochure could be taken by a visitor and used on any number of trips to spread the cost. One general brochure of this type could be developed every year. Topics might be: Arctic wildflowers, birds, marine mammals, land fauna, geology, tidal zone ecology, anthropods (Arctic ecology of butterflies, blowflies, spiders, bumblebees, beetles, etc.); the non-flowering plants (lichens, mushrooms, mosses, horsetails, etc.)
- (d) With the healthy proliferation of brochures consideration should be given to building brochure display racks. These can be mounted on walls, out of reach of small children, at some of the following places:
 - (i) airport lounge;
 - (ii) hamlet office reception;
 - (iii) GNWT office;
 - (iv) Peyton Lodge;
 - (v) Tourism Centre;
 - (vi) Co-op;
 - (vii) The Bay; and/or
 - (viii) Parks Canada.

This would make a suitable winter contract for one of the people in the workshop in Pangnirtung.

3. Advertising

The type of tourist who should be invited and encouraged to visit Pangnirtung is neither the serious fisherman or the experienced hiker/mountain-climber but the upper-middle class individual or couple who have travelled extensively in the past and who are seeking a novel vacation destination and have both the time and the disposable income to come to the Arctic. It is this type of tourist who will be interested in the kinds of trips and projects developed and it is this type of tourist rather than the former who will spend the most money in Pangnirtung on goods and services. These people can be fairly closely defined by profession. Rather than broad spectrum advertising via magazine ads, posters, TV or radio ads, this identifiable group should be approached by direct mailing campaigns.

Direct mailing may appear too expensive but it is not when its effectiveness is considered. It is a method ideally suited to a tourism plan with a well-developed series of brochures. Direct mailing may or may not be beyond the means of the Pangnirtung Tourism Committee but it should be seriously considered over the years as the tourism projects come into being.

4. Community Map Display

The airport is virtually the only route for visitors entering Pangnirtung and vicinity. The community map placed there in 1983 was a good start in utilizing the funnelling effect of the airport. The map display has a bulletin board portion of it which should contain the following:

- (i) photos of the one or both of the Community Hosts;
- (ii) a photo of the Tourism Centre;
- (iii) a list of tourism projects available that particular summer; and
- (iv) a brief text setting out the objectives of the Tourism plan and the descriptions of the services available through the Community Host and the Tourism Centre.

This display should be considered and prepared long in advance of the summer season.

5. Sale of Items

Consideration should be given to the possibility of selling certain items through the Tourism Centre. The following are suggestions:

- (a) Brochures and booklets while many brochures should be distributed free of charge upon inquiry, perhaps others might be sold. If the Pangnirtung brochure written this summer is published in a substantial form with a large number of illustrations, it may be too expensive to distribute all of them without charge. A distinction might be made between a brochure such as a trail guide and a booklet on Pangnirtung or on Arctic wildflowers. Visitors would not be surprised to pay for substantial publications. Publications should not be simply sold at cost as the selling of any item requires overhead cost consideration and in any event the proceeds should go partially to some other good purpose if the trouble is taken to sell items at all.
- (b) Perhaps photographic enlargements of Arctic wildflowers, marine mammals, glaciers, icebergs and community scenes could be sold in the Tourism Office. Capital investment in the form of copies would be necessary as large photo purchases are likely the result of impulse buying for presents, and taking orders for future delivery may not be as productive.
- (c) Quality postcards should be available they are one of the cheapest forms of advertisement as the ad is paid for by the visitor. Postcards currently available in Pangnirtung are inadequate in terms of quality and selection. Scenes in postcards should be of tourism development projects.
- (d) The type of tourist who should be targeted as discussed elsewhere, is also the type of person who will buy quality books about the Arctic natural history, local history, anthropology, poetry and literature, etc. Again this requires capital investment but quality topical books can be ordered on sealift to reduce cost; unlike works of fiction they are good stock for years.

- (e) Perhaps arrangement could be made either with the Weave Shop and the Co-op, or directly with artists and carvers, to sell small gift items of an artistic-cultural nature.
- (f) Maps should be available for sale if anything is. A wide selection of maps is available from Energy, Mines and Resources in Ottawa. Topographical maps of 1:250,000 and 1:50,000 as well as aerials and geology maps could be sold. An up to date map of the hamlet and vicinity with tourism projects annotated upon it could be prepared and sold.

Suffice it to say that the Tourism Office should not be turned into a tasteless souvenir shop. The sale of the aforesaid items should be managed as a <u>service</u> to visitors. Regular office hours and a second Community Host would help. While the Tourism Centre is small there is still the backroom available for expansion and in any event, if plans are afoot to build a proper Visitor's Centre it would pay to have a functioning pilot system prior to opening such Centre so as to iron out administrative and logistic wrinkles.

In terms of economic development, many people in town may be motivated to create or produce suitable items for sale. At least one Pangnirtung resident mentioned during the summer of 1983 that he would like to set up a part-time business as a photographer - what better outlet than the Tourism Centre.

6. Community Host

Currently, the Community Host's job is largely concerned with the orientation of visitors and arranging for outfitting services. With the increasing number of trips available in the next few years, the Community Host's job should focus on a further element, and that is "packaging" visitors in joint trips. For example, it may not be worthwhile to operate the traditional summer camp project for just two visitors. It should be part of the Community Host's job in the future to link up interested parties into appropriately sized groups. One way of doing this would be to have a bulletin board in the Tourism Centre. The Community Host could post a notice if he has 2 or 3 people going on a certain trip and could invite others to join the trip for a full boatload.

The stewardess on the First Air flights should be asked to announce the existence of the Community Host programme.

There should be two Community Hosts, or at least a part-time Assistant Community Host. Many visitors complained about the Tourism Centre being closed. The Host spends extra hours arranging trips and meeting planes and cannot be there all day. Both should have suitable uniforms so they are easily identified.

7. Tourism Centre Displays

While the current Tourism Centre is small, better use could be made of the available space. The back room should be turned into a display room with space for the sale of certain items (see supra).

Photographs and information about available trips, trails and activities should be posted (and future projects?). Could a collection of traditional tools, equipment, clothing, etc. similar to those in the P.C. office or the Museum be displayed? Until a botany brochure is available enlargements of local flower photos could be displayed. There should be a collection of historical photographs in albums to browse through. Post a tide chart. What information about the Tongait and Clearwater establishments could be posted?

8. Photography

For the current Tourism Centre and in anticipation of a new Visitor Centre, work should commence on the development of an historical photograph collection. There are over a dozen identifiable sources of photographs ranging from individuals to institutions. This work could be part of the summer consultant's contract for 1984. Most of this work would have to be done in the south.

A slide collection should be maintained by the Tourism Committee. This will eventually become invaluable for interpretive/tourism purposes.

9. Outfitter Cost Study

A proper micro-economic study of outfitting costs should be done. A coherent basis for costing future trips should be established. It became apparent during the summer that the outfitters are very subjective in evaluating their capital depreciation and the cost of their own labour. The latter is confused with profit. It was not clear exactly how much gas and oil is used for different trips.

This information is needed so that the different boat trips have prices that are relative to each other in terms of the distance travelled and the time involved. The latter two are not necessarily related. Tourists complain about high outfitting costs. They can't be answered without the facts.

The summer consultant in 1984 should conduct a study. Early in the season there should be a meeting with the outfitters so that they are informed and their cooperation will be obtained. (This is necessary because they will be bothered by the consultant for the rest of the summer.)

10. Place-Name Committee

As discussed in the Aulatsivikjuaq part of this report it is essential that the topographical features of the area around Pangnirtung be named. Maps with the proper Inuktitut names should be prepared. Proper spellings and meanings should be clarified. This is important for the preservation of cultural heritage. Practically, it is difficult to develop trips and trails without this information.

A Place-name Committee should be established with representation by the elders and the HTA. The 1984 summer consultant could prepare the maps with an accompanying interpretive report.

11. Community Awareness

During the winter of 1983-84 or next summer there should be a 4 part radio talk show series on the status of tourism development. By the end of 1984 much will have happened since the original MMM study with its interviews, surveys and talk shows. For tourism hospitality (which is an elusive but critical element in

tourism development) the entire community should be fully informed as to what is being done, what is planned and what they personally can do (the problem with waxandelism and campground theft during the summer of 1983 is an example of how parparents can help).

12. BBC Whaling Station Restoration

The old HBC whaling station is an important historical resource which is a currently in a state of disrepair and neglect. Consideration should be given to how the site can be cleaned up and restored. Martin Weaver of The Heritage CarGanada Foundation has some good ideas (613) 237-1066. This would make a good memployment project for the summer of 1984.

13.13. Visitor Statistics

In the salready been suggested that visitor registry boxes be placed on the Ukama are and Ikuvik Trails. Statistics should be kept for all tour is me projects. This would be even include visitors at the Tourism Centre. It would be inconvenient but the Co. Community. Host should get statistics from the outfitters. This information is with for proper tourism development planning.

14:14. ParFuture:Projects

3 (a) & Koolik River Hike(s)

The MMM study suggested that series of extended trails be developed in the Koolik River valley. Three narrow doop hikes would share the same initial alignment but vary incluration from 3 hours, 6 hours to an overnight hike; 6.4 kilometres, 19.5 kilometres and 39 kilometres of located trail respectively.

it It was suggested that 3 wooden tent pads and tent be set up for the overnight whike. Estimated capital cost in 1981 dollars was 2\$32,300.00 with restimated cooperational costs of \$3,067.00.

The MMM study suggested that the thikes becaesigned to give visitors the coopportunity to hike in the Arctic environment with emphasis on scenic features and experiencing the Arctic.

As a theme the latter is not substantive in terms of information. However, if, as recommended elsewhere in this report, a botany brochure is prepared and if the proposed geomorphology brochure for Aulatsivikjuaq is general enough, a hiker travelling the Koolik River trails could be accompanied by sufficient interpretive information.

The use of general interpretive brochures doesn't preclude the preparation of a brief brochure for the Koolik Trails. Such a brochure would contain a map, a description of the route and sites along the way, general hiking advice and suggestions as to what to bring on the hike (including the aforesaid botany and geomorphology brochures).

While doing fieldwork for the Aulatsivikjuaq project a view was taken of pt. X on Fig. 64 from the top of Aulatsivikjuaq. On the general principle that circular routes are more satisfying to hikers than linear routes, consideration should be given to making the overnight hike extend in a loop to the old HBC cabin on Pangnirtung fiord below Moon Peak Valley. From geomorphology maps of the area, the broad shallow valley extending back from pt. X, Fig. 64, is a plain formed by a large glacier-dammed lake. Ground material would be composed of wave-modified till, beach sand and gravel. There also appears to be an interesting set of 4 concentric moraines crossing the valley.

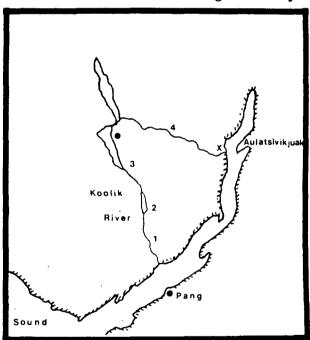


Fig. 64. Koolik River Trails.

Arrangements could be made to pick up the hikers at the old HBC cabin by boat with the cost schedule being the same as for Aulatsivikjuaq. Such a pick-up point would be more profitable than the shorter trip across the fiord to the Koolik River mouth.

It is recommended that exploratory fieldwork be done during the summer of 1984, a draft brochure prepared and work commenced on the trails.

(b) Avatuktoo - Thule Boat Trip

There is no mention of such a project in the MMM study, but it is recommended that consideration be given to developing a boat tour to the Thule site at Avatuktoo.

While accompanying the archeologists from the Prince of Wales Northern Heritage Centre to the Ussualuk whaling station in Cumberland Sound a side trip was made to the Thule site at Avatuktoo which Dr. Ellen Bielawski studied in 1976. There was a large number of well-defined Thule house remains at the site. Actually, the site is quite intriguing as the boulders positioned around the semi-subterranean dwelling spaces seem too large to have been placed without machinery of some sort. The photograph in Fig. 65 gives an impression of what



Fig. 65. Remains of Thule dwelling at Avatuktoo.

There is literature on the site as well as a large body of information on Thule Culture in Cumberland Sound and in the eastern Arctic. There would be little involved in the way of costs for physically developing the site. A general brochure on Thule Culture with sketches, diagrams and photographs of Thule artifacts would be appropriate. The length of the trip might be one day with a char lunch (there is first rate fishing in the vicinity). The cost of the trip would be a little more than the Inuguaruluk trip.

It is recommended that exploratory fieldwork, photography and library work be done during 1984 with a boat trip package and accompanying brochure ready for the 1985 season. It is also recommended that a workshop be prepared for outfitters in Pangnirtung to be given in the spring of 1985 on the subject of Thule Culture with specific reference to the site. This will enable outfitters to answer questions on the tour. As well the outfitters should be in a position to ensure that visitors do not walk in the dwelling spaces of the structures (as they may interfere with future archeological work) and further to ensure that visitors do not go souvenir hunting.

The following references are provided by Dr. Bielawski:

- Schledermann, P. 1976. The effect of climatic/ecological changes on the style of Thule Culture winter dwellings. Arctic and Alpine Research 8(1): 37-47.
- Dumond, D.E. 1977. The Eskimos and Aleuts. London, Thames & Hudson Ltd. at p. 144.
- McCartney, A.P. 1980. The nature of Thule Eskimo whale use. Arctic 33(3): 517-541.
- Mathiassen, T. 1927. Archeology of the Central Eskimos. I: Descriptive Part.

 Report of the fifth Thule Expedition 1921-1924 Vol. IV, Copenhagen, at pp. 133-143.
- Schledermann, P. 1974. Salvage archeology and site survey in Cumberland Sound and Merchants Bay Area, Baffin Island, 1973.
- Schledermann, P. 1973. Salvage, Survey and Excavation in Cumberland Sound, Baffin Island, 1972.

- McGhee, R. 1982. The past ten years in Canadian Arctic Prehistory. Cdn. J. of Arch. 6:65-77.
- Bielawski, E. 1979. 1976 Excavation at Cumberland Sound, Baffin Island, in Archeological Whale Bone: A Northern Resource, McCartney, A.P. (ed.), at pp. 315-327. Univ. Ark. Anthrop. Papers. No. 1.
- Schledermann, P. 1975. Thule Eskimo Prehistory of Cumberland Sound, Baffin Island, Canada. Nat. Mus. of Man, Mercury Series, Arch. Surv. of Can. Paper No. 38.
- McCartney, A.P. 1979. Thule Eskimo Culture: An Anthropological Retrospective. Nat. Mus. of Man, Mercury Series, Arch. Surv. of Can. Paper No. 88.

(c) Cumberland Sound Seal Hunting Tour

The MMM study suggests that a Cumberland Sound Seal Hunting Tour be developed. It is stated that the objective of this tour is to provide an opportunity for visitors to observe an Inuit seal hunt on the Cumberland Sound.

The trip would take a day (about 6 hours). A shore lunch and/or tea on the ice would be provided. There is little capital cost involved in developing this tour package.

As with other projects, it is recommended that a brochure be developed for this trip. The brochure would include the following:

- (i) map;
- (ii) information about the relatively harsh microclimate on the water and recommendations as to clothing;
- (iii) a discussion of the importance of seal hunting in both traditional and contemporary Inuit life;
- (iv) perhaps historical photographs of seal hunting and/or the uses to which seal products were traditionally put, eg. seal skin tents, clothing, etc;
- (v) information about seal ecology, behaviour and reproduction with sketches, diagrams or photographs;
- (vi) a brief discussion of the economics of the seal harvest; and
- (vii) a warning that the trip is not a Sunday school picnic and that if a visitor gets weak at the sight of blood or has Greenpeace affiliations, they ought not to take the trip.

The trip would be a valuable introduction to an important aspect of contemporary life in the Arctic and could go a long way towards dispelling some inaccuracies perpetuated in the media regarding seal hunting – at least in the minds of the visitors.

It is therefore recommended that the fieldwork, photography and library work be undertaken during 1984 with the tour package and accompanying brochure ready for the 1985 season.

15. Summer Consultant - 1984

To fulfill many of the aforesaid recommendations the practice of hiring a summer consultant as in the current and past year should continue for 1984. The term of the contract should be for 6 months - May to October - with the first month spent doing library research in the south, 3 months in Pangnirtung and vicinity, and 2 months in the south doing supplementary research, writing the final drafts of the proposed 8 brochures and preparing the end of season workshops. The following is a summary of the projects which should be included in the summer consultant's contract with estimates of the cost of each project.

Fees:

(1)	Preparation of work schedule for trail crew(s)	\$ 500.00
(2)	Trail repair - Ukama, Ikuvik	
	and Nuvoatiakalla Trails	500.00
(3)	Design of Tourism Office displays	750.00
(4)	Photography associated with all projects	
(4)	and development	500.00
(5)	Kekerten whaling station	000.00
(3)		
	- review of archeologist's report from	
	1983 fieldwork, visit site for further	
	fieldwork if archeological study	
	continues, preparation of draft brochure	1,500.00
(6)	Summer Camp brochure	1,500.00
(7)	Fishing Site brochure	1,000.00
(8)	Botany brochure	2,000.00
(9)	Aulatsivikjuaq	,
(5)	(a) field research	
	· ·	
	(b) supervision of trail construction	
	and development plan report	
	(c) brochure	3,000.00

(10) (11) (12) (13) (14) (15)	 (a) field research and supervision of trail construction (b) development plan report (c) brochure Seal Hunt tour (a) fieldwork (b) development plan report (c) brochure Avatuktoo - Thule trip (a) field research (b) development plan report (c) brochure Outfitter Cost Study 	2,000.00 1,000.00 1,500.00 500.00 250.00 600.00 \$17,100.00	\$17,100.00
Expe	enses:		
(1)	Travel (2 return trips) to Pangnirtung	\$ 2,800.00	
(2)	Outfitting costs to project sites	2,000.00	
(3)	Film and developing costs (does not include recommended archival photograph		
	research costs)	1,200.00	
(4)	Travel to libraries in the south,		
	photocopying, typing, design work, materials for preparation of reports,		
	brochures and the workshops,		
	telephone, interpretation services	3,000.00	
		\$ 9,000.00	9,000.00
			\$26,100.00

PART IX

WORKSHOP

October 6, 1983, Pangnirtung

Agenda

(1)	General tourism development activities (a) Tourism Centre (b) Community maps (c) Community Host programme (d) Trail repair - Ukama and Ikuvik trails (e) Trailhead sign erection (f) Opening of trails by Commissioner N.W.T. (g) Photography (i) flowers (ii) general			
(2)	Pangnirtung brochure			
(3)	Summer Camp (a) Trail construction (b) Camp site (c) Black and white historic photos (d) Sketch of location and tent (e) Landing point			
(4)	Kekerten whaling station (a) Overview of site (b) Artifacts and features (c) Archeologist's work (d) Recommendations			
(5)	Day-use fishing site (a) Overview of site (b) Recommendations			
(7)	Aulatsivikjuaq (a) Overview of site (b) Trail maps (c) Recommendations			

Summary of Recommendations

(8)