THE NORTHWEST HUDSON BAY THULE PROJECT (IV)

A COASTAL SITE SURVEY

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George Wenzel

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ABSTRACT

The fourth phase of the Northwest Hudson Bay Thule Project was designed to complement the research begun in this area by Drs. Charles Merbs and Allen McCartney in the first three phases of the project (1967-1969).

The foci of the 1970 fieldwork were: 1) to locate and map Thule Culture sites in the Winchester Inlet-Chesterfield Inlet area; 2) to obtain settlement data on Thule Culture peoples in the survey area and adjacent inland areas; 3) to survey this area for evidence of Pre-Thule occupation; and 4) to obtain data on Eskimo-white whaler contacts in northwest Hudson Bay.

Twenty-four sites were tested, spanning from Dorset Period to the Late Historic. These finds allowed the expansion of the archeological sequence in the area back to the Dorset Period; provided data on Thule settlement patterns in northwest Hudson Bay; and illuminated possible effects of white contact on the aboriginal population, with reference to settlement pattern and economy, in this area.

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I. INTRODUCTION

The fourth phase of the Northwest Hudson Bay Thule Project was carried out during the months of July and August, 1970. The survey was designed as an archeological reconnaissance of the coastal and adjacent inland areas of the region, stretching from Winchester Inlet in the north to Chesterfield Inlet in the south. This area comprises the southeast margin of the subregion generally known to geographers as the Northwest Hills; specifically, as the Roes Welcome Lowland (Robinson 1968: 203).

Previous to the 1970 survey effort, two other archeological projects had carried on investigations in the primary survey area or in areas immediately to the north and south. These projects were: The Fifth Thule Expedition (1921-1924); and the Northwest Hudson Bay Thule Project (Phases I-III).

The Fifth Thule Expedition carried out its primary investigations in the region of Foxe Basin and Wager Bay (Mathiassen 1927), but excavation also took place at the Igluliardjuk site on the southeast edge of Chesterfield Inlet (Ibid: 110). The Fifth Thule first archeologically isolated and defined the Thule Culture phase of Eskimo prehistory, providing the base for all subsequent research in this area.

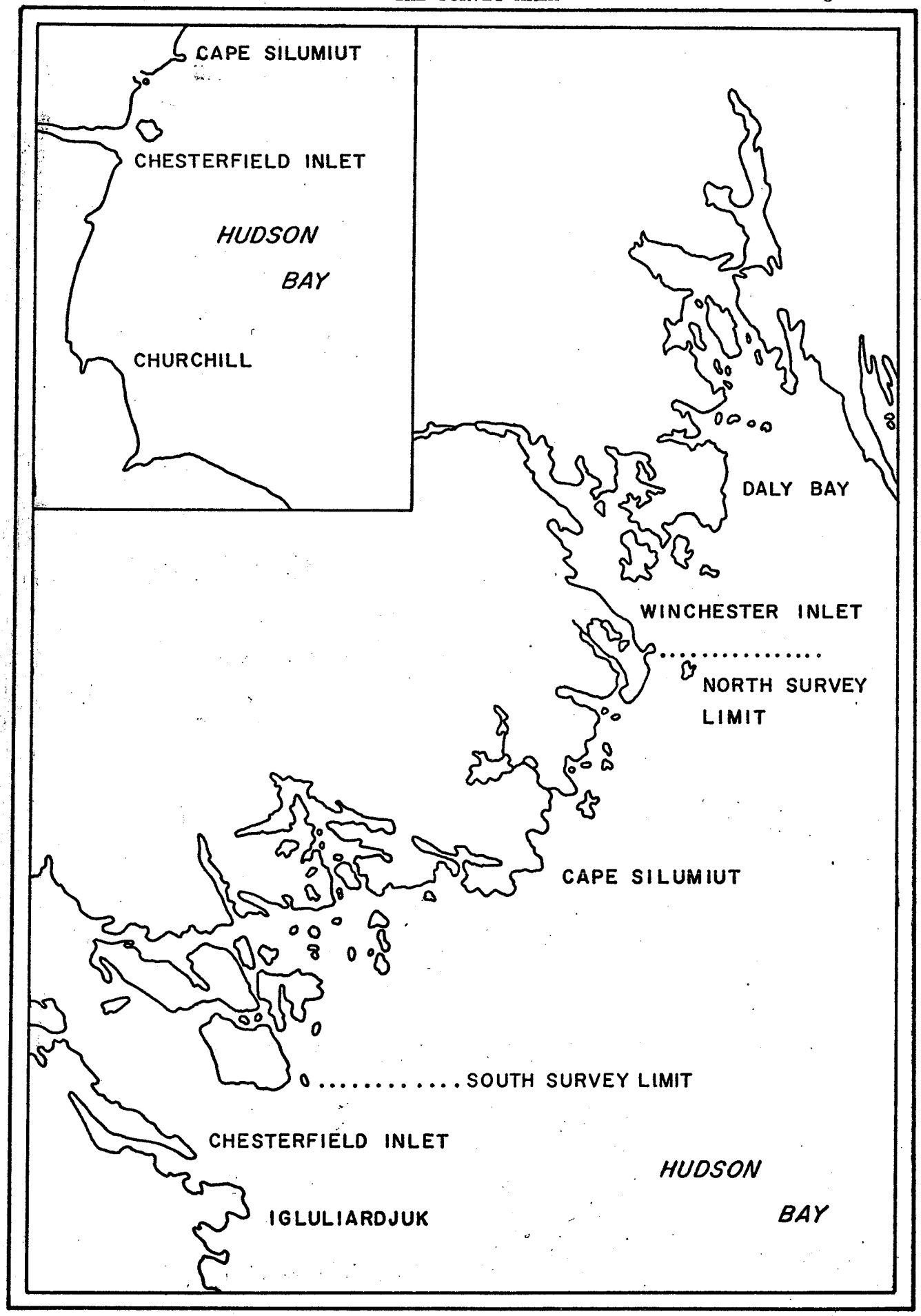
The Northwest Hudson Bay Thule Project (Phases I and II) focused on three sites in the Roes Welcome Sound-Northwest Hudson Bay area: Kamarvik, Yellow Bluff, and Silumiut Island. The purpose of these two phases was to obtain data for the establishment of a biological baseline for the Pre-Contact Eskimo population in northwest Hudson Bay (Merbs 1971: 17). The third phase of the project was aimed at the excavation

of winter house ruins on Silumiut Island in order to study the interplay between ecology and culture (Merbs 1969: 48; McCartney n.d.).

The objective of the Phase IV research design was to locate Thule Culture sites in this area and to recover cultural data for comparison with the Thule material under analysis from the three previous phases of the project. It was hoped that an intensive survey of this area, in conjunction with the work which had already been done on Silumiut, would provide data on the annual cycle of the Pre-Contact population. In addition, two minor objectives of the project were to locate sites and collect specimens related to the early contact period in this region and to investigate the coast for evidence of pre-Thule cultural remains, heretofore unknown from this area of Hudson Bay.

The primary area of concern for the Phase IV survey party in 1970 was the stretch of coastline extending from the southeast edge of Winchester Inlet, opposite Pikudlik (Depot) Island, to the northern shore of Chesterfield Inlet, an area which included Rockhouse Island, Hanbury Island, and Silumiut Island (see Fig. I). The entire north-south length of the reconnaissance was approximately forty air miles, but due to the ruggedness of the coastline and inland terrain the distance which was covered was considerably longer. Unfortunately, due to mechanical difficulties and adverse weather conditions in late August, the survey comprehensively examined the area only as far south as Savoroisik, opposite Hanbury Island, but did include Rockhouse Island.

The survey party, consisting of the writer and one assistant, arrived at Rankin Inlet by air on July 10 and stayed at the Arctic


CAPE SILUMIUT
CHESTERFIELD INLET
HUDSON
BAY
CHURCHILL
DALY BAY
WINCHESTER INLET
NORTH SURVEY
LIMIT
CAPE SILUMIUT
SOUTH SURVEY LIMIT
CHESTERFIELD INLET
HUDSON
BAY
IGLULIARDJUK

Research and Training Center until July 14. We departed Rankin on that day with a Geological Survey of Canada party and proceeded to Daly Bay with them, placing two food caches at Silumiut Island and Ukusialuk. We then returned to Chesterfield Inlet to meet the two Eskimos who were to accompany us for the summer. We departed the afternoon of July 18 by open boat, after a two-day weather delay, bound for Ukusialuk, our first cache.

Throughout July and August, operations were carried out from three main camps located at Ukusialuk, at the northernmost extreme of the survey area, Silumiut Island, near the center of the survey area and the focus of investigation during the 1968 and 1969 seasons, and Savoroisik, just north of Hanbury Island. Survey was done by using a camp as a base and moving out each day from there in concentric circles by boat and foot. A camp was abandoned as the amount of time and gasoline to make a return circuit proved prohibitive. All site mapping was done with a stadia, brunton compass, plane table, and chain. Elevations were determined with a hand level mounted on a sighting barrel. A designation according to the Borden system (Borden 1952) was given when identifiable features or testing indicated a site. Generally, only implements and lithic debitage were collected from find sites. Faunal remains were not kept due to the limited capacity of our boat.

The survey resulted in the discovery and testing of twenty-one previously unknown sites and the further testing of three sites found in 1969. A total of 1,583 specimens of stone, bone, wood, and baleen, excluding human skeletal material, were recovered from sixteen sites.

II. THE ENVIRONMENT

The area of Hudson Bay which was surveyed by the NHBTP (IV) during the summer of 1970 is referred to by regional geographers as the Northwest Hills subregion and extends from Lyons Inlet, at approximately 66° 40' N., south to Chesterfield Inlet and inland as far as Baker Lake (Robinson 1968: 203). The area of specific concern for this thesis within the Northwest Hills is the Roes Welcome Lowland landform region (Ibid.)

This landform forms a continuous coastal belt from Repulse Bay to Chesterfield Inlet and is unbroken with the exception of the physiographic divider known as the Wager Bay Hills (Robinson 1968: 205). Earlier phases of the Northwest Hudson Bay Thule Project extended field operations throughout this area, but in 1970 efforts were concentrated in a portion of the Roes Welcome Lowland south of Wager Bay. This area extends from Winchester Inlet (63° 50' N.) to Chesterfield Inlet (63° 33' N.) and west from the coast up to twelve miles inland.

Physiography

In general terms, the Roes Welcome Lowland is moderately homogenous in appearance, but can be subdivided into the coastal lowland or plain, the interior plateau, and the interior uplands or hills (Lee 1959: 5; Robinson 1968: 205). As the 1970 reconnaissance focused on the coastal plain and the margin of the adjoining interior plateau, the description presented here will center on these areas.

This area, often referred to as the Barren Grounds (Wright 1967: 9; Irving 1968: 26), is a flat, treeless, low-lying region with the

surface scoured bedrock, broken by boulder fields and small, discontinuous beach ridges composed of sand and well sorted gravels (Robinson 1968: 205).

The Wager Bay Hills split the Lowlands into a north section, extending to Repulse Bay, and a southern section which continues to Chesterfield Inlet (Ibid.). South of Wager Bay, rock ridges parallel the coast and rise to an elevation of 100 feet as one proceeds inland. This high topography is particularly pronounced in the vicinity of Daly Bay, while south of Daly Bay the ridges are less steep, beginning several hundred yards from the shore and gradually rising to approximately 125 feet above sea level as one continues inland. It is not until the Savoroisik area that these bedrock ridges again rise sharply from the edge of the sea.

Lee (1959: 4) states that the coastal plain is composed of two parts: a narrow sand-gravel coastal strip and a zone of terraced drift. The coastal zone, which north of Chesterfield Inlet is nearly non-existent, has few oriented glacial landforms and, due to this, few of the many lakes in this zone are oriented parallel to the direction of flow of the last ice sheets (Ibid.). The zone of terraced drift adjoins the coastal strip and contains distinguishable glacially derived features, such as eskers and drumlins, although these forms have been heavily eroded by subsequent marine submergence (Ibid.: 6). Much of the drift and till in this zone has been reworked by wave action and later thermal fracturing (Lee 1959: 6; Wright 1967: 32).

Inland, the topography is that of a series of low ridges, rarely exceeding 125 to 150 feet above sea level, with flat, wet willow-lichen boulder fields in the lower areas. These low areas are dotted with

As the ice retreated westward and northwestward from Hudson Bay, it was followed by a rise in sea level resulting in the Tyrrell Sea (Lee 1959: 14). This flooding is traceable as far inland as Baker Lake (Ibid.: 515). Eskers were wave cut and beach ridges and sand bars were produced (Lee 1959: 15). Lee (Ibid.: 17) places the maximum former stand of the sea at about 560 feet in the vicinity of Carr Lake, while just south of Chesterfield Inlet a maximum of 613 feet is indicated. Lee (1959: 14) places the maximum extent of the Tyrrell Sea between 7000 and 8000 B.P.

Products of Glaciation

(A) Till--The till cover in southern Keewatin is sporadically distributed (Lee 1959: 11); in some areas it is thin or missing completely, while in others it is quite thick (Ibid.). Weeks (1933) reports the presence of till along the Maguse River to the depth of thirty-five feet. Till north of Chesterfield Inlet was conspicuously absent over much of the area surveyed.

Related drumlins and low moraines are frequent in southern Keewatin (Lee 1959: 11), and were observed in the area between Rankin Inlet and Chesterfield Inlet. However, no such features were observed above Chesterfield Inlet.

(B) Glacio-fluvial Sands and Gravels--Geological survey activities in Keewatin (Lee 1959: Wright 1967) have reported that eskers are "conspicuous and prominent" (Lee 1959: 13) in the area. Most of the esker systems head at the Keewatin Ice Divide and are relatively free of deposits, indicating a shortage of glacial debris at the ice sheet source. (Ibid.).

The area of heaviest esker concentration is to the southwest of the divide (Ibid.). Heavy esker concentrations are also found south of Chesterfield Inlet and inland north of Chesterfield Inlet and west of Winchester Inlet (Lee 1959: 9; Wright 1967: 29).

Climate

The climate of western Hudson Bay has been described as "Arctic-continental" (Damas 1963: 16). It is an area of high humidity, low precipitation, cold winters, cool summers, and high winds (Thompson 1968: 268). While this is a region of relatively low topography, variations in terrain and, particularly, drainage play important roles in shaping local weather (Ibid.: 266). Along the west coast of Hudson Bay drainage is of more importance than land features, with permafrost being the major influence on drainage (Marr 1969: 177). In summer, permafrost is partially responsible for the wet state of the Barrens by preventing absorption of meltwater and precipitation, thus consuming energy which would be used in warming the air (Thompson 1968: 267).

The most apparent and longest of the Arctic seasons is winter. This is the period when the greatest amount of incoming solar energy is reflected due to ice and snow (Pruitt Oral Communication). Winter lasts from approximately November to May and is characterized by short periods of daylight, high winds, and, in the Low Arctic area of Hudson Bay, frequent snowshowers and blowing snow (Pruitt 1970: 93).

The main accumulation of snow is received in November and December (Table I) before the deepest cold of winter sets in. From December until March, wind becomes an integral factor in the environment (Thompson 1968: 272). The high winds at this time are important because they have the

Table I: Monthly and Annual Averages of Snowfall and Total Precipitation (inches) from Selected Hudson Bay Locations (from Thompson 1968, 270).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Churchill Airport													
Period: 1943-1960													
Precipitation	0.50	0.55	0.65	1.04	1.20	1.63	2.03	2.40	2.08	1.50	1.52	0.89	15.99
No. of Days	9	9	10	12	11	9	12	13	14	15	17	13	142
Snowfall	5.0	5.5	6.5	9.9	6.5	0.7	T	0.0	1.4	9.7	15.0	8.9	69.1
No. of Days	9	9	10	11	10	1	0	0	2	11	17	13	93
Chesterfield													
Period: 1931-1960													
Precipitation	0.33	0.34	0.45	0.66	0.52	1.03	1.75	1.67	1.53	1.23	0.81	0.64	10.96
No. of Days	6	5	7	8	7	7	11	10	11	11	9	8	100
Snowfall	3.3	3.4	4.5	6.5	4.1	0.9	0.0	T	1.4	8.0	8.0	6.4	46.5
No. of Days	6	5	7	7	6	1	0	0	2	8	9	8	59
Coral Harbor													
Period: 1942-1960													
Precipitation	0.32	0.36	0.36	0.55	0.75	1.02	1.39	1.48	1.30	1.13	0.65	0.49	9.80
No. of Days	7	8	7	8	7	7	11	10	11	11	9	8	108
Snowfall	3.2	3.6	3.6	4.8	6.6	2.4	0.3	T	3.4	9.7	6.4	4.9	48.9
No. of Days	7	8	7	8	8	4	0	0	4	12	11	9	78

effect of producing wind induced snow storms (white outs) and because they produce a significant drop in the real temperature (Thompson 1968: 273; Pruitt 1970: 93). In exposed areas the snow may be scoured or blown away exposing vegetation and the under-snow habitat to cold and dessicating winds (Pruitt 1970: 94).

The average daily temperature decreases steadily at this time due to high winds (Table II and the reflection of ice and snow of up to 80% of incoming solar radiation (Pruitt, Oral Communication). The average temperature at Chesterfield Inlet is -25^{o} (Thompson 1968: 277). Toward the end of February, temperatures begin to increase due to longer photo-periods.

In April, the amount of daylight increases every day and there is a gradual warming of the air temperature. By May, large leads have begun to open in the winter pack ice (Thompson 1968: 279). The average daily temperature begins to reach the low twenties and, due to the increasing amounts of open water, low clouds blanket the coast (Ibid.). It is during this time that migratory birds and animals return to the Barren Grounds (Kelsall 1968: 63).

In summer, the vast open water area of Hudson Bay is the source for cooling the tundra and for the fog and low clouds which prevail over the coast at this season (Thompson 1968: 281). Precipitation at this time is at its heaviest. The cold waters of the Bay also have a cooling effect on the land as winds off the water are cooled by the relative coldness of the Bay (Ibid.).

Table II: Average Wind Speeds (mph) (from Thompson 1968, 271).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Chesterfield	16	14	14	14	14	12	12	13	16	18	16	16	15
Coral Harbor	12	12	13	13	13	12	12	13	13	15	15	13	13
Churchill Airport	14	14	14	14	13	12	12	13	15	16	15	16	14

Table III: Average Number of Days with Blowing Snow (Period 1955-1960) (from Thompson 1968, 275).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Chesterfield	15	12	10	7	7	1	0	0	1	6	10	14	83
Coral Harbor	10	12	6	7	5	1	0	0	1	4	7	11	64
Churchill Airport	12	12	8	9	4	0	0	0	0	3	14	12	73

Autumn, like Spring, signals a transition. Cold air masses move down from the High Arctic, bringing low temperatures and storms (Ibid.: 269). Snow becomes increasingly more common and new sea ice begins to form. Wind velocity also increases and the fall migration of birds and land animals begins (Ibid.: 269-271).

Flora

The vegetation zone of primary concern in this thesis is that of the Low Arctic tundra. This region is devoid of arboreal species, the treeline extending to Churchill, then breaking away to the northwest (Savile 1968: 399). Permafrost is one factor retarding plant growth, along with wind and cold (Porsild 1964: 5). The effect of permafrost with its storage of surface water and the movement of soil during periods of freeze and thaw is the alteration of the soil habitat (Ibid.). Wind and cold dissecate plants, slow organic decay, and scour vegetation with sand and wind driven snow crystals (Porsild 1964: 6; Pruitt 1970: 94). Thus, vegetation is restricted to those places where the optimal habitat is available winter and summer.

Where adequate soil exists, the ground is blanketed by grasses, sedges, herbs, and shrubs. Shrubs are represented by dwarf willow (Salix L.) and dwarf birch (Betula glandulosa)(Savile 1968: 401). Both are found in areas of abundant snow cover with Salix primary importance being that of a food source for herbacious birds and mammals (Porsild 1964: 65).

Grasses and sedges are represented by some twenty-five species of Carex L., by cotton sedge or Arctic cotton (Eriophorum scheuchzeri), and

by a large number of grasses (Savile 1968: 402). Heaths are also found on the drier sites of the region, particularly on beach ridges and gravel flats (Ibid.). The more important of these include bog rosemary (Andromeda polifolia), Labrador tea (Ledum palustre), arctic pyrola (Pyrola grandiflora), crowberry (Empetrum hermaphroditum), and, on wetter ground, cloudberry or salmonberry (Rubus chamaemorus)(Ibid.: 402,403).

The herbs which populate the coastal and inland areas include arctic avens (Dryas integrifolia), three varieties of peas (Hedysarum, Astragalus, and Oxytropis), several species of saxifrages, and Epilobium latifolium, the broad-leaved willow-herb (Ibid.: 403).

These, along with buttercups (Ranunculus), dandelions (Taraxacum), ferns, and fern allies, constitute the major portion of the perennial plant population in the Barren Grounds region (Porsild 1964).

Rooted plants, such as these perennials, are restricted to habitats which have adequate soil, shelter from scouring winds, and protection from winter cold (Porsild 1964: 5, 6). But, approximately 50% of the plants in the Low Arctic are relatively free from these restrictions. This population is comprised of lichens (Pruitt, Oral Communication). Twenty-six families of lichens are found in the Low Arctic, and at least half of these families are represented in the Roes Welcome Lowlands. Those which are most important as caribou fodder are the fructose lichens Cladonia alpestris, C. rangiferina, Cetraria nivalis, and C. islandica, all four of which are present north of Chesterfield Inlet (Kelsall 1968: 72).

Several edible species have been recorded in the ethnographic record. These include the aforementioned cloudberry and crowberry and the

Roseroot, Rhodiola rosea (Porsild 1964: 103). One other plant which appears in the ethnographic accounts is the dwarf willow (Salix L.) which was used as a summer source of fuel (Balikci 1970).

Fauna

The vertebrate fauna of the northwest coast--Barren Ground region includes fish, birds, land mammals, and marine mammals, all of which may be divided into two classes: migratory and non-migratory. Further division may be made as to their utilizable potentials to human inhabitants. The following are the species which have been identified within the primary area of concern.

(A) The fish of the Hudson Bay region comprises three major groups (Hunter 1968: 361): marine species, which live in a salt water habitat throughout their entire lives; anadromous species, which spend a part of their lives in the sea and return to fresh water to spawn; and fresh water species, which normally confine their lives to the fresh water environment.

Marine species in Hudson Bay are for the most part bottom-dwelling forms which hold very little economic value for man. Included are cod (family Gadidae), particularly Boreogadus saida or arctic cod; the sculpin family (Cottidae); and the Ammodytidae, sandlances (Hunter 1968: 362). The anadromous and freshwater species of the region are of considerably greater economic value to man. Among the anadromous types the members of the family Salmonidae: brook trout (S. fontinalis), whitefish (Coregonus clupeaformis), and arctic char (Salvelinus alpinus) are of the greatest economic use, particularly the char (Ibid.: 363). Other anadromous and

freshwater species which are found in or are periferal to the area, but are of limited or no economic value are: Thymallidae arcticus (grayling); Esox lucius (northern pike); Coregonus artedii (shallow water cisco); Chrosomus eos (redbelly dace); Couesius plumbeus (lake chub); and the sticklebacks (Ibid.: 364). However, of all the species present, only char, due to its abundance, seems to be readily exploited by the contemporary population.

(B) Avian fauna in Hudson Bay form three groups: insectivorous, carnivorous, and cliff nesting species (Bliss et al 1970). Cooch (1968: 446, 447) lists 58 species of birds which breed in the Arctic-Alpine Zone and are found along the west side of Hudson Bay. These form two groups: resident species (winter tundra dwellers) and migratory species (summer breeders only)(Ibid.: 453). With the exception of the rarer carnivorous birds and the small insectivorous and shore birds, all of the avian fauna in the area is exploitable for either flesh or eggs (Boas 1888). The following are the species identified by Mrs. Ann Bleed (Oral Communication) as being present on the Roes Welcome Lowlands during the summer of 1969).

Carnivorous species: the peregrine falcon (Falco peregrinus), the short-eared owl (Asio flammeus), the snowy owl (Nyctea scandiaca), the common raven (Corvus corax), and the long-tailed jaeger (Stercorarius longicaudus) and the parasitic jaeger (Stercorarius parasiticus). Because of their low density, these birds are of little use to man.

Shorebirds are more numerous and include the glaucous gull (Larus hyperboreus), the herring gull (Larus argentatus), the black-bellied plover (Squatarola squatarola), the spotted and least sandpipers (Actitus

macularia and Erolia minutilla), and the Hudsonian curlew (Numenius phaeopus).

The water fowl population of the region is made up of larger birds which are of important economic value. These are the whistling swan (Olor columbianus), the Canada goose (Branta canadensis), the snow goose (Chen hyperborea); all of which are present in late summer. Sea ducks, which are present the entire summer, must also be included here. These are the oldsquaw (Clangula hyemalis), the common and Hudson Bay eiders (Somateria mollisima, spectabilis), and the surf scoter (Melanitta deglandi).

The last group of birds from this area includes the herbivorous, insectivorous, and lake inhabitants. These are the common and arctic loon (Gavis immer, G. arctica), the arctic tern (Sterna paradisaea), rock and willow ptarmigan (Lagopus mutus, lagopus), the redpolls (Acanthis flammen, hornemanni), the Lapland longspur (Calcarius lappenicus), and the snow bunting (Plectrophenax nivalis). The ptarmigans and loons represent exploitable species, but the loon is strictly a summer dweller, while the ptarmigan is present the year round.

(C) The land mammals which inhabit the Roes Welcome Lowland are divisible into resident species and migratory species (Bliss et al 1970). The principal herbivore of the tundra region west of Hudson Bay is the barren ground caribou (Rangifer arcticus)(Clarke 1940: 84) and is also the chief migratory species of the tundra (Kelsall 1968: 108). The caribou is the principal source of meat and furs for the inhabitants of the region (Ibid.: 206; Damas 1968: 144). The migration into the Roes Welcome Lowland area begins in the early spring, with the heaviest concentrations

of individuals present during the summer months (Kelsall 1968: 361). The fall migration does not seem to be as important in this area as has been documented from the Caribou Eskimo area (Birket-Smith 1929) since caribou which have summered move into the Northwest Hills for part of the winter (Hakaluk, Oral Communication).

Other land mammals include the least weasel (Mustela arctica), the arctic fox (Alopex lagopus), the wolf (Canis lupus), lemmings (Lemmus trimucronatus and Dicrostonyx groenlandicus), the arctic hare (Lepus arcticus), the arctic ground squirrel (Spermophilus undulatus), shrews (Sorex), polar bear (Ursus maritimus), the northern red-backed mouse (Clethrionomys rutilus), and the meadow vole (Microtus pennsylvanicus) (Clarke 1940: 28-38; Kelsall 1968: 52). Musk-ox (Ovibus moschatus) are common in the Thelon region (Clarke 1940: 73) and there are informant reports of musk-ox from Melville Peninsula (Hakaluk, Oral Communication).

(D) Sea mammals indigenous to the waters of Hudson Bay are especially important to the successful human utilization of the resources of this area. They represent a year round, but particularly winter, food source. Seal, walrus, and whale represent the marine mammalan fauna to be found in the waters of western Hudson Bay (Mansfield 1968: 379; Sergeant 1968: 388).

One species of whale, the beluga or white whale (Delphinapterus leucas), is commonly found in the area today (Sergeant 1968: 391). Beluga offer a source of employment to the people inhabiting the coast from Churchill to Foxe Basin, as well as food and, in ethnographic times, fuel (Ibid.). Prior to the twentieth century, however, the bowhead whale

(Balaena mysticetus), a large baleen whale, was also common to the waters of Hudson Bay (Ibid.: 395). The presence of both beluga and baleen whales has been shown from archeological data (Bandi 1969: 150), indicating a greater density in former times. Due to the migratory nature of these creatures, procurement activities are necessarily restricted to the open water season. (Howell 1930).

In winter, when whaling and other hunting activities are non-productive, the presence of sea ice offered the opportunity of seal and walrus hunting. (Damas 1963: 19; 1968: 144). Most common of the pinnipeds are the harp seal (Pagophilus groenlandicus), the harbor seal (Phoca vitulina), and the ringed seal (Pusa hispida). These three species are available along the coast the entire year (Mansfield 1968: 379, 382, 383).

Less common currently in the area around Chesterfield Inlet are the bearded seal (Brignathus harbatus) and the walrus (Odobenus rosmarus). Walrus are presently scarce in the waters south of Southampton Island (Williamson, Personal Communication), while bearded seals may be taken in the winter.

III. THE SITES

A total of twenty-one previously unreported sites was found in the coastal lowland and interior plateau areas of the Northwest Hills between Winchester Inlet and Chesterfield Inlet. In addition, three sites which had been found during earlier phases of the Northwest Hudson Bay Thule Project were examined (Merbs 1969: 48; 1970: 18). In all, twenty-four sites were surveyed and tested in 1970.

All references to sites have been made according to the Borden site designation scheme for Canada (Borden 1952). Each local number sequence is based on the order of discovery in a particular quadrangle. Locations according to latitude and longitude have been determined on the 1:506,880 maps of the National Topographic Series of Canada (1960) and are as near accurate as field conditions would allow. All site plans and elevations were done with Brunton compass and hand level.

Various features are associated with each site and included in this chapter. The most outstanding of these which are here included are: semi-subterranean house depressions - the remains of oval pit dwellings associated with Thule winter encampments (Mathiassen 1927: 110); fox traps - used here to mean low, box-like deadfall traps; burial cairns - rectangular stone structures erected over the dead; single tier tent rings - single ovals of stone used to hold down the edges of tents; multiple tier tent rings (qarmat) - ovals similar to single tier rings with the exception that several tiers of stone are piled one atop another; meat caches - cairns similar to those used for burials, but without heavy