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THE ESKIMO HUNTER AT POINT HOPE, ALASKA

PART II

MAY TO SEPTEMBER, 1960

5-9/60

by

Don Charles Foote

Submitted to the
United States Atomic Energy Commission
in compliance with
Modification No. 2, Supplemental Agreement to
Contract No. AT (04-3)-315

December, 1960

DISCLAIMER

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INTRODUCTION

This report is intended to be a chronological continuation of the June, 1960 Interim Report entitled, "The Eskimo Hunter At Point Hope, Alaska: September, 1959, to May, 1960." It is based on my field research from June 1, 1960, to December 1, 1960.

As in the June report, all statistical data contained herein are based upon verified information only; the statistics therefore necessarily represent the minimum activity for the season. The names of all boat captains, the dates of their departures, destinations, purposes and dates of return have been noted. In addition, the names of individual hunters, together with the dates and places of kills, have been recorded, all as part of the verification process.

I wish to thank Mr. Joseph Towksjhea of Point Hope, Alaska, for his able assistance during the summer of 1960. I wish also to thank Messrs. Norman Omnik and Martin Oktalik, both of Point Hope, for their contribution to the Human Geographical Program during June, 1960.

D.C.F.

Point Hope, Alaska

December 2, 1960

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PART I

LATE SPRING

At Point Hope, winter seems suddenly to expire and spring suddenly to begin, but summer's arrival is far less dramatic. Spring mingles into summer in odd incongruities characteristic of both seasons. On typical days in May, for example, native activities reflect the overlapping seasons. Such days were May 16th and 17th, 1960: several Point Hope men boarded the mail plane for flight to Kotzebue and summer employment; three spring whaling crews hauled their boats to the south lead in search of bowhead whales still migrating northward; bumble bees and flies buzzed around the budding willows and flowers in the village while hunters ranged north and west on spring sealing trips; eider ducks, murres, gulls, owls, ravens, finches, cranes, falcons and snow buntings might be observed overhead. Noontime temperatures rose well above freezing on those days, but on May 18th, thick fog blanketed Point Hope, temperatures dropped below freezing and sea ice ground and roared on three sides of the village.

Late spring is a season when the Eskimo hunter reacts more in response to immediate opportunities than he does in a set pattern. Analysis of his behavior in this period must be viewed within the context of incongruity and sudden change.

Late Spring Whaling

Spring whaling continues at Point Hope as long as possible, and it ceases only when the whaling captains are convinced that successful kills no longer can be made. Several factors influence their decisions. Spring sea ice may become so puddled and pitted that access to the open water beyond is impracticable. Crew members may not be available or reliable; at this season they are often compelled to provide for the immediate needs of their households and dog teams, and they may in consequence leave the village to hunt seals for several days at a time. If the early spring whaling has been relatively successful, less pressure is felt to continue the hunt; if the early take was meagre, whaling captains may prolong the effort. An important factor, too, is the amount of money and food supplies still available to the whaling camps as the season wears on into late spring. Finally, the condition of the south ice and the Nuwuk Barrier Ridge is decisive; without reliable ice, normal whaling operations are not possible.

Whaling usually ends by the first week in June, but it is not officially over until the spring whaling feast, called Nalukatuk. In 1960, the last whaling trip was made on May 29th, and within two days some captains had already converted their boats and equipment to use for seal hunting and summer travel. Nalukatuk was held from June 9th to 11th.

Although the hunt ended on May 29th, white whales, in addition to the large black whales and killer whales, continued to pass Point Hope until

late July, 1960. Although the villagers are sometimes able to hunt the summer white whale with success, no landed kill was made in 1960.

Spring Sealing: General Ice Conditions

Spring sealing constitutes one of the most important contributions of all the year's activities to adequate living conditions at Point Hope. Failure of this hunt has ramifications throughout the whole ensuing year. In the following sections, a general analysis is made of significant factors involved in the spring sealing activity, and specific observations on the 1960 season are presented and evaluated.

The spring sealing hunt is based on two factors; the annual northward migration of bearded and ringed seal, and the existence of sea ice along the Tigaraq Peninsula's south shore during the month of June.

Ice conditions in 1960 were generally favorable to the hunt. In mid-May, the ice north and west of Point Hope began to break into large ice fields several miles in width. At first, open water appeared sporadically along the northern end of the Tigaraq Peninsula, depending on wind and current. On June 1st, a large ice field floated free from the Pingoo area, allowing limited ocean travel by boat from Ipiutak northward.

Southerly winds and current finally dislodged the north ice near the village on June 11th, although the Nuwuk Ridge and the south ice held fast. From this date until July 8th, the north side of the Tigaraq Peninsula was open or choked with drifting brash and block ice, depending again on surface winds and currents.

To the south of the Peninsula, thick winter ice remained stationary until June 25th, when it moved southward for one or two days and then returned. The Nuwuk Barrier Ridge stood immobile during this time. On July 1st, the south ice once again drifted out from the beach, but blocks and brash ice continued to wash the shore until July 12th. The last grounded blocks of the Nuwuk Ridge floated free on this date, and about one week later the large ice piles, heaped on the south beach in February, finally disappeared.[1]

New sea ice continued to form, to thicknesses of one-quarter inch, until July 9th. The first winter sea slush ice appeared on October 26th, 1960, one hundred and nineteen days after the last ice remnant of the previous season had melted.

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1. Sea ice and its associated melt water remained the most important source of drinking and household water until July 12th, 1960. In 1960, a faulty village water pump and pipe hindered Point Hope in utilizing its central water supply. Drinking water, from mid-July to late September, was obtained from shallow household wells, the village well, open ponds between the beach ridges and, later in the fall, from the first snow falls.

June ice concentrations to the south of the Tigaraq Peninsula appear to depend largely on a surface wind from the southerly quadrants and on the anchor effects of the Nuwuk Barrier Ridge. The Ridge appears to inhibit westward and northward ice movement past Point Hope.

Spring Sealing: Composition of Hunting Force

Besides the basic influence of ice, the character and location of the hunting force is of significance in the spring sealing efforts at Point Hope.

Generally speaking, the hunters locate themselves on the south ice within reasonable distance of their suklauks, or deep underground permafrost storage cellars. Two concentrations of hunters will be found centered near the suklauks of Jabbertown-Beacon Hill and of Nuwu-Tigara. Scattered hunting will occur between the two areas.

The composition of the hunting force, however, is more of a variable than its location. In 1960, the pattern appeared to assume the following shape.

A small number of men, all highly skilled, successful and vigorous hunters, took advantage of their additional skills in the industrial labor field and forsook spring sealing for wage earning in Kotzebue or Fairbanks. Although the total village kill of seals may decrease somewhat because certain hunters are not present in spring, the decrease is minimized or offset by the entrance of younger, less skilled hunters into the food gathering force.

It should be noted, however, that in relation to other hunting activities at Point Hope, spring sealing requires less skill and less equipment. Inland caribou hunting, winter sealing and summer hunting by boat require considerable capital investment in the form of dog teams, sleds, harnesses, boats, outboard motors, oil, gas, tents, stoves, etc. These hunts also require the kind of experience gained only after several years of hunting. In both respects, spring sealing is less demanding.

Since the spring seal hunt occurs when both the local school and the Mount Edgecumbe high school are closed for the summer, the Point Hope hunting force is augmented by unmarried, school-age hunters. Summer is the only time of the year when these young hunters are fully available for food gathering.

No single family can afford to forego the spring seal hunt entirely; on this hunt depends the welfare of the family for the entire year. It is possible, however, to lose some older members of the family to the wage-earning activities outside the village and still to obtain the meat needed for the coming year. In addition, extended family relationships may allow some members to leave the village before or during spring hunting, even though there is no corresponding replacement by younger hunters. In this case, the extended family consolidates for the hunting period.

Spring Sealing: Hunting Techniques

Two techniques of spring sealing employed at Point Hope: hunting with the aid of umiaks, or large skin boats powered by outboard motors, and hunting at open holes in the spring sea ice. In analyzing hunting techniques, some consideration of ice conditions and animal behavior is necessary.

The Nuwuk Barrier Ridge is constructed of a series of ice piles forty to sixty feet above sea level, and obviously well grounded into the shoals beneath. Between these piles are areas of varying width and lesser verticle relief which are not grounded on the ocean floor. Through these "gates" in the Barrier flows the major ocean current and with it the migrating seals. To pass under the Barrier and through a gate, the seal must dive.

Recognition of a seal's species can be readily achieved by observation of the animal's morphology, color and behavior. The oogruk (bearded seal) for example, has a head so large that it can be confused only with that of a walrus. Unlike the walrus, however, the oogruk's exhalation of spent air is less pronounced and his swimming pattern offers the silhouette of a continuous line from head to back. In addition, the oogruk is a very serious migrant, who, unless his curiosity is forcibly aroused or unless he is about to haul out on the ice, seldom pauses in his swimming as he surfaces from a dive. These facts, combined with the oogruk's habit of replenishing air at surfacing or during a series of four or five slow surface rolls, make the oogruk an excellent target for the hunter.

Spotted seals tend to be sharp-nosed and they swim head high or they float, exposing a distinct brownish, spotty back. Ribbon seals, while they may behave similarly to the common seal, have a noticeably larger and almost ebony black head. The ringed seal, although offering the smallest target of all the seals, has an insatiable curiosity which compels him to survey his surroundings with prolonged intent.

Unfortunately, it was impossible to study -- quantitatively -- the species composition of the spring marine mammal migration past Point Hope, although this survey might be accomplished with relative ease and at little expense. It seemed, however, that the migrating oogruk were mostly mature animals traveling in pairs or in scattered groups as large as one hundred or more in number. In a fashion similar to that of the ringed seal, the oogruk came in definite waves, sometimes twenty minutes apart, sometimes several hours apart. Ringed seal and oogruk would often be present in the same wave.

Ringed seals were mature adults traveling alone, in scattered groups and as females with young several months old. Filial attachment was obvious in the last case, especially when the adult was killed. Despite the presence of hunters and boats and the sounds of shots and hooks being cast at the floating female, the young would often refuse to abandon the mother. In one case, a young seal remained in the area two days after its mother was taken, often crying but apparently capable of feeding itself.

All spotted and ribbon seals seen or reported killed were mature animals.

Boat Hunting

The first boat hunting began on June 1, 1960, and continued throughout the month. In 1960, the general technique used by boat parties was to traverse the broken ice field on Point Hope's north side until a point was reached westward on the Nuwuk Barrier Ridge. At this point, the major ocean current swings north past the Tigaraq Peninsula. Here the boat would be dragged stern first onto the ice, and the party would spread out in wait of seals, oogruk and walrus. A normal boat party consisted of three to five hunters and a younger boy who acted as cook. Unless ice and weather conditions were prohibitive, a hunting trip lasted from 24 to 36 hours or more.

The hunters would seat themselves on the north side of one of the gates under the Nuwuk Barrier Ridge, and here they would await seal and oogruk which had to surface after the dive beneath the Barrier. During times of a heavy seal movement, the animals might appear every few minutes, often within an arm's length of the ice where the motionless hunter is seated.

Heavy rain is considered ideal for such boat hunting, especially when there is little or no wind to hinder operations on the water. Apparently, however, soome oogruk and seal do not haul out or remain on the ice during a spring rain, but rather continue their migratory course northward.

It is generally true that a Point Hope hunter will prefer the oogruk to any other species of seal. Should a ribbon seal appear together with an oogruk, however, many hunters would consider either a target. In spring, such choices often occur because the migrating seals, although mostly oogruk and ringed seals, also include in their groups significant numbers of ribbon and spotted seals.

During early to mid-June, seals and oogruk often float for a short time after being killed, provided they are taken in open ocean water well flushed by a current.[1] In small holes within the ice pack, however, the lower salinity of the water may prevent floating. Later in the season, too, the animal's blubber may have thinned so much that the carcass has only marginal buoyancy. Regardless, the Point Hope hunter assumes that spring seals will sink when killed and he prepares his equipment and techniques accordingly.

The ingeelok, or throwing line, hook and sinker, is the most common retrieving gear. The retrieving harpoon and the skin float are also widely used in Point Hope boat hunting. It is standard procedure to have the ingeelok near at hand, its line neatly coiled and ready for instant use. The same is true of the harpoon, which is placed in the boat's bow. Another useful item for retrieving seals is a small, one-man skin boat. Whether a man would approach a wounded oogruk in such a craft, however, is questionable.

When hunting as a boat crew, it is common practice to keep some members of the crew near the large umiak at all times in case an oogruk is killed beyond the range of the retrieving hooks. Therefore, when several hunters are seated together, they may choose segments of the horizon within which each will shoot. There are, however, no set rules. Courtesy often allows the man nearest a target to have the first shot, but if he should be slow his partner may fire and claim the kill.

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1. A strong current can trap floating seal in vertical eddies and draw the animals down into the water.

Rules governing the division of a crew's take vary with the boat captain, who may establish the procedure before departure. In most cases, each man claims his individual take of seals and birds; oogruk, walrus and white whale--all of which require the efforts of several men to land -- are divided among crew members with extra shares going to the boat and motor owners.

A Point Hope Eskimo understandably dislikes the loss of a known kill or of a wounded animal. He will do everything within reason to prevent this waste. Since the rifle replaced the harpoon, however, spring sealing has resulted in some loss of dead or wounded seals or oogruk. A floating kill can normally be retrieved. In the case of oogruk, however, the initial floating may last only 30 to 120 seconds before the animal slowly sinks. Fast, efficient work is essential to recovery of the animal.

When recovery is by boat, the boat crew often waits poised as another man fires at the seal. Then the boat is launched at a run, the motor is started at full throttle and the bow man makes ready with the harpoon. Since seconds are critical, the boat may reach the slightly floating oogruk at top speed, requiring the harpooner to send a well-aimed and powerful thrust at precisely the right instant. For a successful strike, the harpoon must completely penetrate the thick hide, such that under back pressure the harpoon head will detach from the shaft, twist sideways into the blubber and meat, and hold fast.

Upon assurance that a harpooned oogruk is dead, its lower lip or flipper is pierced and with a heavy rope it is attached securely to the boat for towing.

Retrieved animals of all species are placed on the sea ice until a boat party returns to the village. To aid in preserving the meat, cold sea water is poured over the carcass from time to time.

Spring hunting from boats may also entail slow cruising among drifting ice pans while the hunters wait alert for seals, oogruk or walrus which are either swimming in open water or are napping on the ice. At Point Hope, this technique normally accounts for only a small percentage of the total spring kill. Fog, sudden winds and erratic ice movements in the open ocean and amid strong, variable currents, necessitate a high degree of caution when operating a boat beyond the sight or sound of shore.

Boat hunting, therefore, occurs while the Nuwuk Barrier Ridge remains intact and secure enough to accommodate a hunting party on the level, intericepile sections. At other times, usually later in the season, boat hunting can take place amid the moving ice fields.

Stationary Hunting

The second major spring seal hunting technique involves hunting without the aid of boats.

The majority of Point Hope spring sealing takes place along the Tigaraq Peninsula's south shore in a belt 1000 yards or more wide and extend-

ing from Nuwuk to beyond Beacon Hill. A south wind, or at least the absence of northerly winds, is generally essential to keeping this south ice fast against the shore.

During the latter part of May, 1960, the ice south of Point Hope held fast from the Nuwuk Barrier Ridge to just north of Kivalina; in a somewhat unusual development, it held fast despite strong northerly winds. In this embayment, there was a large resident population of seal and oogruk, as evidenced by the number of breathing holes and on-ice napping animals observed during air flights on May 25th and 27th. From the number and pattern of breathing holes, it was also evident that a major seal population had been trapped here since at least early February, when the ice field was firmly established. This idea was confirmed by reports from sportsmen who from the air observed concentrations of oogruk and seal on the ice seaward from Cape Thompson and Cape Seppings as early as February, 1960.

Spring hunting of the marine animals resident in the fast ice north and south of the Tigaraq Peninsula was extremely important during late May and early June, 1960. Dog food and fuel were at a premium then, because the last successful seal hunting had ended in late February. From March 7th to the conclusion of intense whaling activity on May 15th, the village took only 85 seals. From May 16th until June 16th, the landed kill was just 59 seals. This meat income provided less than 25% of needed dog food for the period March 7th to June 16th, assuming that no meat went for human uses. In spring 1960, many Point Hope dog teams were in the process of slow starvation.

Quite abruptly, especially under the influence of a south wind, an intense migration of seals and oogruk begins to pass the Tigaraq Peninsula from the south. In 1960, the hunting of this migration began on June 17th and continued until June 29th.

While hunting conditions prevail, every active hunter must strain himself to the utmost in order to achieve a successful landed kill. It is not uncommon for Point Hope men to hunt, without sleep, for 72 hours or more during this period.

The common hunting technique during this main migration is for the hunter to station himself beside a convenient melt hole or opening in the south ice. He prefers to be near enough to shore to provide a shallow depth of water for recovery of the kill and for an easy dog team haul to land. Concealment behind existing ice piles or behind a constructed blind of ice blocks is usually advantageous.

As the oogruk or seal appears within an area judged accessible with an ingeelok, the hunter fires and quickly begins the process of hooking for the animal. In shallow water, a hunter may choose to allow several animals to sink before he begins painstakingly to drag the bottom for his kill.

In most cases, the hunter's responsibilities cease when the kill has been brought to shore. From that point, the women and younger household members assume the tasks of butchering and storing the meat and of preparing the skins.

Tents are erected along the entire south beach, to beyond Beacon Hill, where exhausted hunters may nap for an hour or two, eat a hearty meal and then return to the ice. Here, too, can rest the female household members who butcher the animals as they are dragged ashore.

The oogruk and seal meat is wrapped into 50 to 75 pound parcels, termed tuktuk, and it is quickly stored in the suklauk, or permafrost cellars. Animals awaiting butchering are stored either in the cold sea water or under an insulating mound of beach gravel. Skinned seals or portions of oogruk can be stored in more shallow suklauks for use later as dog food.

Oogruk skins, essential raw material for the Point Hope Eskimos, are pegged out on the ground at Jabbertown-Beacon Hill and within the village proper. Because a successful hunter can secure far more animals than could be butchered immediately, and because animals are not often dragged from the sea ice until a hunting period is concluded, many days or weeks can pass before the last tuktuks of meat are cached and the last skins are stretched to dry. In 1960, spring sealing and its consequent activities were not completed until the second week of July.

Summary of Spring Sealing:

Date	Oogruk	Ringed	Spotted	Ribbon	Walrus
May 16, 1960	2	5			
18					1
24		3			
28		8			
30		1			
June 1, 1960	1	2			
2		7			
3		3			
4		5			
9		2			
10		1			
12		3			
14		4			
15		3			
16		9			
17	4	22			
18	10	26		1	
19	10	23		1	
20	12	20			
21	20	25	2		
22	10	16	2		
23	32	25			
24	7	11		1	
25-6	57	14			
27	11	10		1	
28	51	28	1	1	1
29	16	11	1		
30	5	2			
	248	290	6	5	2

PART II

SUMMER

Egg Gathering:

The two source areas of eggs are the bird colonies of Cape Lisburne and Cape Thompson. Which colony is utilized depends upon ice conditions and weather. A moderate north wind may produce brash ice and blocks along the Cape Lisburne coast but open water to Cape Thompson. Strong winds or a high swell can prevent travel to either colony.

When egg gathering parties may leave Point Hope is another variable, depending upon the spring seal hunt and continued presence of seals, available cash and a village supply of gasoline and motor oil for the outboard motors. The appearance of newly laid eggs on the bird cliffs is also a controlling factor.

In 1960 the first boat party left for Cape Lisburne at the end of June but was forced back by sea ice. However, Cape Thompson was accessible during the first 10 days of July and four boats visited these cliffs. Egg gathering, as a primary stimulus for travel, had ceased by July 19, 1960. During this period three boats visited Cape Lisburne and five boats reached Cape Thompson.

Summer Boat Travel:

From July 3, 1960 to October 3, 1960, there were over 50 major food gathering trips made to distances more than twenty miles from Point Hope. The northernmost point reached was Niak Creek on Cape Lisburne, the southernmost point was Kotzebue, and the easternmost point was Ogsaghaek on the Kukpuk River. In all, an estimated 13,400 passenger miles were covered during the boat season.

Weather is the predominate control on boat travel in summer.[1] The specific weather factors are wind speed, direction and the associated state of the ocean or lagoon water. A second important factor is summer precipitation, which results in varying depths of river water.[2] During the 1960 summer season, about one day in three offered favorable conditions for boat

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1. In late July, 1960, several large, ocean-going tugs and barges sought a calm anchorage along the Tigaraq Peninsula's south shore while they waited a change in ice conditions to permit a northward passage to Point Barrow and beyond.

2. On August 12, 1960 the Kukpuk River, at Tarrux Creek, was a measured 3.5 feet higher than on August 4, 1960.

travel with the majority of good days occurring in July and August. All boat travel ceased by October 3, 1960.

It is extremely precarious to generalize about summer boat travel at Point Hope because, as with inland sled travel, the Eskimo hunter is liable to move at the most unexpected times. In 1960 lightly loaded skin boats were used in winds up to 50 m.p.h., and they were hand-pushed through solid river ice and beached at top speed in ten foot breakers. A boat captain proceeding from Point Hope assumes that, at any time, he may be called upon to travel up to the limits of his skill and equipment.

Regions near Point Hope vary as to their degree of boat travel permissibility under similar conditions. In other words, during strong winds a boat may more readily proceed along the Kukpuk River or the Tigara Lagoon than in the open ocean. With a south wind the north side of the Tigaraq Peninsula may afford better conditions than the south side and vice versa. Areas of particular submarine topography and coastal land configurations also contribute to travel conditions.

Combining those objective factors which can influence boat travel near Point Hope, one may generalize as follows. From Point Hope northward, along the Tigaraq Peninsula to Sinyak, conditions are favorable with southeast to southerly winds not exceeding 20-25 m.p.h. and when no ocean swell is running from the westerly or northerly quadrants. The shallows on the seaward side of Sinyak present a special obstacle, especially when a northerly swell is running. Northward from Kotaek the coast is navigable best during periods of calm or with winds from the southeast to northeast. In the latter case, however, a trip from Kotaek to Point Hope can be impossible.[1]

Except for the valley of Akalowlik River there are only two landing places for small boats from Kotaek to Imnarruk. This stretch of coast toward Cape Lisburne named Killeegrallik is characterized by nearly verticle cliffs plunging down to a narrow beach. The two landing places here could only be used in time of emergency and then it would require hauling boats and equipment high up the scree slope and into the small, hanging valleys above.

Although the Eskimos of Point Hope have traveled this section of coast for centuries, the voyage can be, and often is, a hazardous one. More than one story relates the total disappearance of boats and crews who set out to pass Killeegrallik.

In contrast to the northerly coastal route to Cape Lisburne, the southern shore from Point Hope offers ample security for small boat landings. Except for the cliffs of Cape Thompson, which are liberally interspersed with wide beaches and creek valleys, a small boat can easily land anywhere between Point Hope and Kotzebue. However, boat travel along this southern coast is most favorable during calm periods or with winds from the eastsoutheast.

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1. A boat can be portaged into the Tigaraq Lagoon and proceed to Ipintak or a second portage at Jabbertown and thus to Point Hope.

to northeast.

Westerly winds can restrict ocean travel on both the north and south sides of Point Hope, although some movement can be made in the lee of the Tigaraq Peninsula or on Tigara Lagoon.

Lagoon and river routes up the Kukpuk River are less susceptible to weather restraints by wind. But the shallow nature of the Tigara Lagoon can preclude the use of outboard motors, at least those running at full-power, while at the same time, moderate winds can raise a severe wave chop. In addition, low water in the river handicaps travel and may prevent easy access to the interior beyond Kukpuk and Ogsaghaek. It would seem that summer boat trips seldom penetrate the Kukpuk River drainage beyond Kaiaksuk-Angmarox Mountains.

Summer Caribou Hunting

Caribou hunting begins as soon as sea ice conditions permit boat travel. In 1960, the first boats left Point Hope on June 3rd, a full month before the sea ice had completely abandoned the area. Caribou hunting reached two peaks in 1960; one before spring sealing and the second beginning with summer egg gathering. Throughout the summer and fall, caribou hunting parties by boat left the village whenever weather conditions permitted.

Akin to caribou hunting with dog teams, the range of summer hunting is closely allied to the occurrence of caribou and the transportation means. Every summer for the past decade or more, small bands of caribou, predominantly males, have moved through the coastal highlands of Cape Lisburne and Cape Thompson. These animals can be found along the coast, in the access valleys from the coast to the interior and near or beside the Kukpuk River and its delta distributaries.

Normally, summer caribou are killed within a reasonable walking distance of some spot accessible by boat. This is because the back-packing of caribou meat and skins over great distances is too laborious and time consuming. A delay in transporting the kill may prevent the return to the village of the meat before it spoils.[1]

To facilitate the back-packing of meat, summer caribou are butchered in a somewhat different manner from those taken by dog team. In summer the carcass is often segmented into convenient pieces; one load of the hind legs and hind quarters, and two loads of a front shoulder and side. The head, heart, kidneys, stomach, liver and skin comprise another load or can be incorporated with the larger sections. A single load's weight depends upon, among other things, the individual concerned, the nature of the terrain and the distance to be traveled.

Summer caribou meat at Point Hope is usually consumed within the village soon after the kill is returned. Preservation of excess meat can be done in the suklauk or, should an individual so desire, paniktuk (air

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1. It always assumed that weather conditions permitting boat travel might worsen and thus present an early return to the village. Once a kill has been made, it is essential to return while the weather holds good.

dried caribou meat preserved in seal oil) can be prepared from a portion of the meat. One sought-for delicacy of summer caribou is the thick back-fat and intestinal fat, which are always carefully saved. As in other seasons, the bone marrow is eaten raw at any time.

Except for ocean fish and an occasional bird or squirrel, summer caribou meat is the only source of fresh meat in Point Hope from mid-July to September.

Summary of Summer Caribou Hunting

Ref. No.	Date of Kill	Location of Kill	No. Animals
1	June 4, 1960	Akalowlik River	3
2	19	Akalowlik River	3
3	21	Eevangyek	6
4	July 3, 1960	Niak Creek	3
5	3	Cape Dyer	2
6	6	Ukingyek Creek	15
7	6	Pinguchaek	1
8	9	Kaypalauk Creek	9
9	12	Kukpuk River	1
10	13	Cape Dyer	2
11	18	Eechowwik	3
12	18-25	Kaypalauk Creek	4
13	23	Daktaeluk Creek	1
14	30	Eesook	3
15	Aug. 2, 1960	Naik Creek	20
16	4	Daktaeluk Creek	1
17	4	Ukingyek Creek	2
18	5	Ukingyek Creek	1
19	5	Ukingyek Creek	1
20	5	Kukpuk	1
21	11	Aiaugatak	3
22	12	Kukpuk	1
23	13	Kukpuk	1
24	13	Daktayluk Creek	3
25	14	Kukpuk	1
26	15	Cape Thompson	5
27	17	Sulupowaugtuk	1
28	31	Sulupowaugtuk	4
			101

Summer Fishing

In mid- to late-May, numerous schools of tom-cod can frequent the waters near Point Hope. No conscientious effort was made to fish these schools during 1960.

In late May and early June a large-headed, fatty fish, Kanaiyuk,

was hooked and speared in the shallow water between shore and the melting sea ice. This fishing activity is most common when the low spring sun casts dark shadows across the fishing sites.

As soon as the southern shore of Point Hope is clear of sea ice, seining for Dolly Varden and other migrant fish will commence. This fishing continued from July through August in 1960, shifting to the north shore during the latter month.

Although gill nets can be and are used, the most usual ocean fishing technique utilizes the hand-drawn seine. Such fishing can be accomplished by a lone individual or with the aid of several persons and a boat.

Summer fishing in 1960 was restricted to several older men of the village and to a few distinct households. So great was the demand for fresh fish, however, that even the most successful and persistent fishermen were unable to split and air-dry more than a few dozen or so fish. Fortunately, the existence of a small, private, deep-freeze unit in the village allowed some fish to be quick frozen for storage or for consumption as kok, which is fresh frozen raw fish.

Other summer fishing was sporadic and usually occurred in combination with egg gathering or with caribou hunting trips. On the Kukpuk River, fishing with commercial and eskimo fishing hooks brought in some fresh grayling, humpback salmon, and trout. All this, except perhaps the pink salmon, was consumed immediately.

Assumedly, netting of humpback salmon in the delta or lower reaches of the Kukpuk River is not worth the effort and expenditure necessary to utilize this fishing ground. Although the salmon would make a contribution to summer dog food, the same fish, prepared and preserved by air-drying, contains relatively little food value in comparison to the larger dog salmon or to marine mammals. Significant humpback salmon fishing at the village proper could be a different matter, however.

Summer ocean fishing netted about 40 sacks or 4000 pounds and other fishing, outside the village, brought in no more than a hundred or so pounds.

Other marine organisms, such as the sea-slug or sea-worm, bivalves and crabs, are gathered from the beach, especially after a heavy surf. At least several pails full of such marine animals were collected and consumed during the summer of 1960.

Summer Employment

Since the latter part of the nineteenth century, Point Hope men have left the village during summer to work for wages or for trading goods. In late years the work has been solely for wages paid in cash.

The first summer workers in 1960 left Point Hope on May 16th and, except for two men who retained their jobs throughout the fall, all the workers had returned to the village by the end of October. In all, twenty-

seven men left the village for work in Kotzebue, Nome and Fairbanks. Only five men were accompanied by, or later received, their wives and families.

Point Hope workers are definitely oriented toward specific skills within the construction field. These skills include carpentry, iron and sheet metal work and cement work. Employment in the Alaskan fish canneries was not an incentive for summer employment by Point Hope men in 1960.

Details of the actual importance of summer employment must await further research, but it was evident in 1960 that a considerable amount of earned wages were invested in capital goods such as building materials,[1] hunting equipment, fuel and staple foods.

It was also evident in 1960 that the movement of men to the outside labor market did not drastically impinge upon spring seal hunting or on summer caribou hunting. A nucleous of skilled hunters remained in the village all summer. The vast majority of summer workers returned to the village before the autumn river fishing and caribou hunting had begun in mid- to late-September.

Additional Notes

It should be assumed that in late summer, after the heavy tourist influx in Kotzebue, one or more boats from Little Diomede Island could proceed coastwise to Point Hope. This will be especially true in those years when Point Hope has had a successful spring whale hunt. Two Diomede boats arrived in Point Hope on August 16-17th, 1960, and departed on August 22nd, 1960.

As in 1959, there were few berries amid the delta uplands and banks of the Kukpuk River. A minimal amount was gathered in 1960. Berries, although not picked in 1959 or in 1960, because of poor growth years, should be considered part of the annual Point Hope diet. In addition, summer hunting parties can be expected to eat Kungoolik (Oxyria digyna, Sourgrass) and Eepik in small but consistent quantities.

Fall fishing on the Kukpuk River began on September 16th, 1960, and concluded on November 17th, 1960. In all, about 14,000 pounds of fresh water fish were taken.

The first fall caribou was killed on September 19th, 1960, and as of November 23rd (the last recorded kill for this report), a total of 332 animals had been taken by Point Hope hunters.

Seal hunting was highlighted in the summer-fall of 1960 by the killing of two fur seals, one on August 2nd and one on October 21st, 1960.

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1. The complete supply of building plywood imported by the Point Hope Native Store in September, 1960, was sold out within a week after its arrival.

Summary of Hunting May-September 1960

Week Ending	Fish lbs.	No. Caribou	No. Fox, etc.	No. Seals	No. Walrus	No.W. Whale	No. Birds
May 8				4		4	
15		6				1	
22				7	1		
29	100			11			
June 5		3		19			
12				6			
19		3		113			
26		6		254			
July 3		5		138	1		
10	500	25		1			
17	500	3					
24	500	4					
31	500	7					
Aug. 7	500	26		1	2		
14	550	9	25				
21	550	6					
28	500						
Sept.4		4					100
11	100						200
18	100						200
	4400	107	25	554	4	5	500

CONCLUSIONS

The most important activity of Point Hope, during late spring and after the conclusion of intense whale hunting, is the harvest of marine mammals; seals and oogruk. Before the June migration of seals begins, the village can be heavily dependent upon caribou meat secured from February through April and into May, the catch of migrating spring birds and a seal population resident in the winter ice to the north and south of the Tigaraq Peninsula.

Should the early spring whale hunt fail and contrary winds dislodge the late spring ice south of the Tigaraq Peninsula, Point Hope would suffer a food shortage alleviated only by caribou meat obtained in late-winter-spring, and by eggs, birds, caribou and fish taken during the summer.[1]

Summer employment, although necessary, does not prevent the village of Point Hope from reaping an equally necessary harvest of spring seals, birds, eggs, summer caribou and fish.

Food gathering during the summer is focused on the bird cliffs and adjacent highlands and valleys of Cape Lisburne and Cape Thompson, and the Kukpuk River drainage as far as Kaiaksuk-Anmarox Mountains depending upon the level of river water. In all events, summer travel and hunting routes are associated with water; the more accessible areas being the Kukpuk River and the Cape Thompson highlands.

I believe that summer hunting by Point Hope residents in the immediate vicinity of Augotoruk Creek was at a minimum in 1960 because of the extensive activity of the resident Project Chariot camp personnel. Augotorux Creek is, however, a traditional summer hunting ground for the Point Hope Eskimos. Any sign of reduced use of the area during the 1960 summer can be attributed to, beside the already mentioned restraints of wind and other natural phenomena, the presence of large-scale air and mechanized land traffic, noise, smells and other features of the Chariot site which would prevent a normal number of game animals from frequenting the mouth of the Augotorux Creek. The loss of this region as a summer hunting area cannot be determined quantitatively since there are no statistics available prior to commencement of Project Chariot operations in the creek bottom.

It is obvious that the year around Point Hope hunters, of necessity, reap a rich harvest from their land and sea whenever and wherever the natural conditions of weather, topography and the occurrence of animals allows them.

In all respects, the village patterns of autumn and early winter 1960 conformed well to the descriptions given in the November, 1959 Preliminary Report and in the June, 1960 Interim Report.

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1. Starvation would not ensue so long as government policies continue to cover the Eskimos' welfare. It should be noted, however, that available cash within the village is at a seasonal low during late-spring and early-summer.