

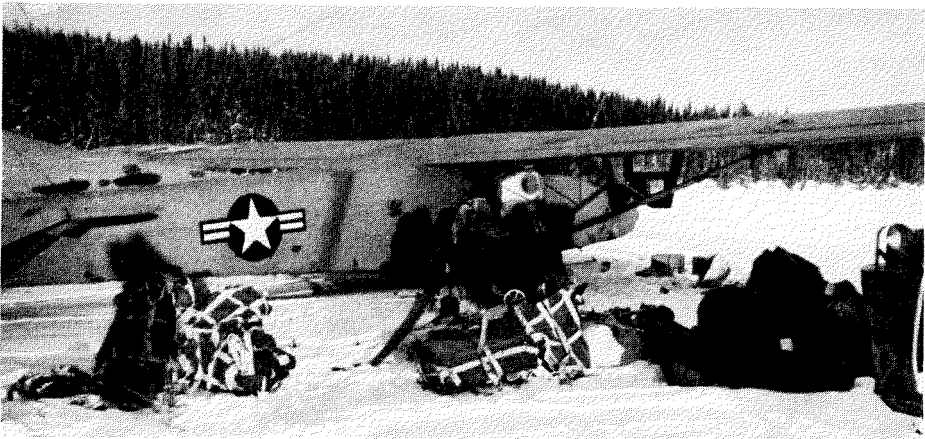
August 1949 in the vicinity of Dundas Harbour, Devon Island, making a stratigraphic study of the region. The party was transported by the U.S.S. *Edisto* on her northern supply mission. Investigations were confined to the areas immediately to the west and northwest of Dundas Harbour. Three closely related and overlapping stratigraphic sections representing over 3000 feet of sediments were measured and about 250 lithologic samples were taken. Fossils were collected from Lower and Middle Cambrian, and Lower and Middle Ordovician beds. Study of the data and fossils collected is being made at Dartmouth College under the supervision of Professor Andrew H. McNair.

ECONOMIC STUDY

Economic studies in Alaska

Dr. Demitri B. Shimkin spent two months in Alaska in the summer of 1949 studying the economy of the Territory. He visited Juneau, Anchorage, Fairbanks, and Fort Yukon and from interviews with local authorities, consultation of records and personal observations collected data regarding the agricultural and mineral resources, living costs, medical problems and conditions, and transportation and educational facilities. Particularly detailed investigations were made at Fort Yukon where Dr. Shimkin spent over three weeks. A detailed report on the economy of the Fort Yukon region is now in course of preparation.

NORTHERN NEWS



Glider landing equipment on Blair Lake.

U.S. Air Force survival ration studies in Alaska

A field test was carried out in Alaska during January and February of 1950 in an attempt to establish requirements for

an all-purpose survival ration. The test took place at Blair Lake, some fifty miles southeast of Ladd Air Force Base, by a group of scientists and fourteen volunteers from the U.S. Air Force. In



Test camp at Blair Lake.

temperatures ranging from 20 to 30 degrees below zero, the test subjects spent ten days under canvas living on a ration which contained only 475 calories, or the equivalent of two candy bars a day.

This experiment formed the conclusion of a long series of studies which has been carried out during the past few years by the Aero Medical Laboratory, Wright-Patterson Air Force Base, in conjunction with the Arctic Aero-medical Laboratory, Fairbanks. The experiment was planned in collaboration with Colonel J. Bollerud, head of the Fairbanks Laboratory, by a staff of five, who also experienced all phases of the test themselves. They were: Project Director, Dr. H. C. Dyme, chief of the Nutrition Unit; Military Officer in Charge, Capt. R. W. Briggs, flight surgeon and pilot; Psychologist, Capt. E. L. McCollum of the Fairbanks Laboratory; Mr. R. Fuller in charge of supplies and equipment, and the writer as Special Consultant.

The experiment began with a four-day standardization period at Ladd Air Force Base. The personnel were then flown to Blair Lake by Detachment B of the 10th Rescue Squadron and their

equipment was landed on the lake by glider.

The field test consisted of living on the trial ration under simulated emergency conditions. The survival camp was established by the subjects themselves and standard equipment was used. Camp work, skiing, and snowshoeing involved considerable caloric expenditure during the test, and the weather was at times quite severe with strong wind and considerable snowfall. In the ten-day period weight loss up to 14 pounds occurred, but no serious deterioration in morale or in physical condition resulted from this regime.

At the end of the ten-day period the personnel were flown out of the area by a variety of aircraft: helicopter, glider, and Cessna, provided by the 10th Rescue Squadron. The experiment was concluded with a four-day recovery phase at Ladd Air Force Base, where the laboratory work was completed by Dr. E. Bowden and his assistants.

The experiment was successfully carried out and yielded valuable data for the evaluation of the adequacy of certain arctic survival rations.

KAARE RODAHL

Labrador winter notes, 1950

This is a poor year for seal in the northern Labrador. Nain hunters in 1947 got 4000 seal; in the winter of 1949-50, about 400. The freeze-up came early, around December 20, and the seals moving south arrived at the same time; being hindered by ice bars from going into the bays, they continued outside. Seal meat for Eskimo and settlers is short, and for the dogs, worse.

Caribou, also, are scarce. Hunters from among seventy Indians at Nutak killed 27 the first time inside. On the second trip they killed 2. This particular band of Naskapi have ceased to be barren ground hunters. They were transported to Nutak by schooner from Davis Inlet in 1948 and early in March left Nutak to go south again. One Eskimo hunter from Nain went inside for a week and got 12 caribou.

Partridge, however, are plentiful. A Nain settler estimates he has killed 500 so far; a ranger and a storekeeper got 40 in one day. Last year partridge were few and presumably next year will be a poor year also.

There is a good sign of foxes in the northern Labrador, but prices are low, so the Eskimo is not interested in hunting. The government store in Nain is paying \$3.00 for a white fox, \$1.00 for a red fox. A settler hunter south of Nutak got 15 foxes, including 2 crosses and a silver, and was paid only \$18.00. North West River prices are said to be much better, though I did not check on this.

In March 1950 dogs were dying at Nutak, Hebron, Okkak and Webb Bay from disease. Nain people were inclined to think that the disease was brought by foxes. Indians at Nutak picked up 17 dead foxes at scattered places inside, and one settler reported fighting between his dogs and a fox; the dogs died soon after. Loss of dogs, of course, is serious for the settlers; one family came to Nain to take children home three weeks before boarding school closed at Easter, for fear their dogs might not live to make the komatik journey from Nutak across the Kiglapaits to Nain. The Moravian missionary at

Nain has inoculated some dogs there, and will inject others later.

The early December freeze-up brought sustained frosty weather in January and February. At Nain in January the temperature was below zero every day, usually -15°F or lower; for seventeen days it was -20° or lower, and reached -35° . In February the cloudless and frosty weather continued; on only two days was the thermometer above zero, and one day the storekeeper, who keeps the government weather station, recorded -36.7° . Total snowfall at Nain in January was 17 inches, in February $10\frac{1}{2}$ inches; a light fall. But in March snowfall became heavier: 27 inches fell in a few days, and by the middle of March a total of 34 inches of new snow lay on the bays, ponds, and ridges.

JOHN E. FRAZER

Recent finds from Sir John Ross's Expedition 1829-33.

Mr. L. A. Learmonth, who is spending the summer of 1950 making an archaeological reconnaissance of King William Island and Boothia Peninsula, has reported two finds connected with Sir John Ross's expedition of 1829-33 in search of the North West Passage.

On April 11 a native, who came from near Lord Mayor Bay, brought in a brass cannon to Mr. Stanners, the Hudson's Bay Company's post manager at Spence Bay. The marks and measurements of the cannon are as follows:

Date	1796	→ F. Kinman
Monogram	CCCCXXXII	GR (III?)
		20 - 5
Letters cut in end of one axle	569	
Overall measurement	65 inches	
Bore at muzzle	$3\frac{3}{4}$ inches	
Diameter at breech	27 inches	

It would seem probable that this cannon was one of "the brass guns [which] were put on the ice" (p. 195)¹ at Felix Harbour in order to lighten Ross's ship the *Victory*. The *Victory* reached Felix Harbour to the north of Lord Mayor

¹Ross, Sir John. 'Narrative of a second voyage in search of a North-West Passage'. London, 1835.

Bay, east Boothia Peninsula, in 1829 and wintered there. In the summers of 1830 and 1831 the *Victory* was only able to push eighteen miles to the north, wintering at Sheriff Harbour in 1830-1 and at Victoria Harbour in 1831-2. Provisions were running short and there seemed no prospect of getting the ship out so Ross decided to abandon her in Victoria Harbour and make for Fury Beach on foot dragging boats and sledges.

Also on 11 April 1950 hunting equipment was brought in to the H.B.C. post from a grave which had a wooden leg lying alongside. It appears that the grave

must be that of a native for whom a wooden leg was made by the ship's carpenter from the *Victory*. In his account of the voyage Ross tells how the native, Tulluahi, who had lost a leg, was brought in to the ship's surgeon in January 1830. The surgeon found the leg "long healed", and that "there was no difficulty in applying a wooden leg. The carpenter was therefore sent for to measure him" (p. 254). The leg proved to be a great success: "The promised leg, being now complete, was fitted on; and there was little time lost in finding its use and value; as the disabled person soon began to strut about the cabin, in apparent ecstasy; . . . I doubt if any effort of surgery ever gave more satisfaction than we had thus conferred, in reproducing a man fully serviceable once more to himself and his community" (p. 264). Commander James Clark Ross, second in command, notes that Tulluahi returned on 4 June 1830 for repairs to



Tulluahi with his daughter Shullanina on the left and his wife Tirikshiu on the right. (From a lithograph by Sir John Ross).

his wooden leg which had got broken (p. 398).

Sir John Ross's expedition is perhaps best known for the discovery of the north magnetic pole on Boothia Peninsula by Commander Ross on 1 June 1831. Commander Ross, nephew of Sir John, later became Sir James Clark Ross and the foremost polar explorer of his time. The 1829-33 expedition which discovered and mapped Boothia Peninsula was remarkable in that the crew of twenty-three spent four winters in the Arctic with the loss of only one life. The carpenter, who had made the leg for Tulluahi, died of scurvy towards the end of February 1833, only six months before the crew of the *Victory* made their way by boat into Lancaster Sound and were taken on board the *Isabella* of Hull, a ship which Sir John Ross had himself commanded in 1818.

The *Victory* herself had an interesting career. She was at one time used as a

packet ship between Liverpool and the Isle of Man. She was also the first ship equipped with a steam engine on an arctic voyage. The engine however did not prove satisfactory and was abandoned at Felix Harbour with the guns where it provided the local Eskimo with iron for many years. On Sir John Ross's return the performance of the engine became the subject of a long and bitter controversy between him and the makers.

Mr. Learmonth has sent the cannon and the hunting equipment to the Royal Ontario Museum in Toronto.

Geodetic Survey work during the summer of 1949¹

During the 1949 field season the Geodetic Survey established a record number of astronomical control points, partly because of good weather and partly because of transport facilities. As a result of the summer's work 136 points were put in, including 19 in Foxe Basin for which the Geographical Bureau's expedition was responsible, providing control for 40,000 square miles of arctic and subarctic territory. The work was carried out in close cooperation with the R.C.A.F. Number 10 Detachment of 413 Squadron travelled 146,980 miles transporting Geodetic parties, and commercial aircraft 12,220 miles. The greater part of the commercial mileage was flown in northern Quebec.

Two main Survey groups were responsible for the northern astronomical work. One under A. A. Johns worked in northern Quebec; the other under G. A. Corcoran worked north from Great Slave Lake to the Arctic Islands. In addition precise levelling and triangulation was carried out along the Mackenzie and Alaska Highways.

The Quebec group, which consisted of two parties, established 27 astronomical points in the territory between Ashuanipi Lake and Ungava Bay. In this area the weather was not good; during August there were 50-mile-an-hour gales and snowstorms, and rain was frequent. Knob Lake, the airport for the Labrador iron mining companies, was used as the main base for the aircraft trans-

porting the parties. The members of this group, which included S. L. Kao, L. A. McHattie, and G. Gregoire, reported that there seemed to be an unusual number of mink and fewer caribou than expected.

The Great Slave Lake group was divided into four parties. Surprisingly good weather enabled this group to establish 90 points, 25 of them on the arctic coast or on the islands of the Arctic Archipelago. Four Canso and three Norseman aircraft were employed for transport. Work was started in the Great Slave Lake area and was carried northward and eastward as weather permitted. On the arctic coast a strip about 200 miles in depth was covered between Amundsen Gulf and Simpson Peninsula (Gulf of Boothia). The parties continued on to the southern coast of Victoria Island and northward through the Boothia Peninsula to Fort Ross on Somerset Island. Eastward progress was much more rapid than expected and Baker Lake was reached by the end of the season. The members of the parties, which included W. D. Forrester, A. C. Rae, A. J. Shama, J. Woodruff and D. M. Knox, reported difficulty in obtaining astronomical data under the conditions of almost continuous daylight.

D. C. Coombs of the Geographical Bureau's expedition to the islands in Foxe Basin, led by T. H. Manning, put in 19 points in the Hudson Bay area. The majority were in northwestern Foxe Basin and included fixes on Prince Charles, Airforce, Rowley, and the Spicer Islands.

Northern precise work was carried out by two Survey groups. R. W. Serviss was responsible for two levelling parties which continued previous work northward along the Mackenzie Highway to Great Slave Lake to provide precise elevations for detailed mapping and for engineering developments. Four triangulation parties under F. P. Steers worked along the Alaska Highway in the vicinity of Watson Lake, tying in surveys along the British Columbia-Yukon boundary, and established an accurate control framework for further surveys and development in the area adjacent to the Alaska Highway.

¹Reprinted from the *Arctic Circular*, Vol. 3, No. 2 (1950) pp. 18-20.