display interpreted as the prelude to the first mating of the season between individuals not yet firmly paired were seen on the mainland. In one case, this display was mutual and led within seconds to a compete copulation. In the second instance, a male made this display at a female but elicited no response from her and both birds almost immediately took flight and were lost to view. Several matings between the partners of apparent red phalarope pairs, not preceded by the display referred to above, were seen on Promise Island. Instances of paired males "offering" to mate with "strange" females were also seen here. The "strange" females in question, reacted with a mild gesture of rejection, making what may be described as a mere hint of a threat movement with the beak. Still and movie photos of both species of phalaropes were taken.

Local Eskimo bird and mammal names were collected in the Chesterfield Inlet area, and at Baker Lake a list restricted to bird names was made. The Eskimo names for prominent topographic features (on several of which the Canadian Army Survey markers were found) were recorded.

General ornithological observations added 17 species to the local avifauna as it was known from previous published works.3,4,5 These species are listed below (asterisk indicates that a specimen was collected): yellow-billed loon (Gavia adamsii), Brant (Branta bernicla)\*, white fronted goose (Anser albifrons), mallard (Anas platyrhynchos), green-winged teal (Anas carolinensis), red-breasted Merganser (Mergus serrator), sandhill crane (Grus canadensis), stilt sandpiper (Micropalama himantopus), dowitcher (Limnodromus griseus), thayer's gull (Larus thayeri), glaucous gull (Larus hyperboreus), sabine's gull (Xema sabini), snowy owl (Nyctea scandiaca), cliff swallow (Petrochelidon pyrrhonota), hoary redpoll (Acanthis hornemanni), common redpoll (Acanthis flammea)\*, and Oregon junco (Junco oreganus)\*. Identification of the specimens collected was confirmed in the course of a visit to the National Museum of Canada.

Proof of breeding of the following species, the local breeding status of which was either uncertain or unknown, was obtained: Canada goose (Branta canadensis)\*, pintail (Anas acuta), sandhill crane, black guillemot (Cepphus grylle)\*, savannah sparrow (Passerculus sandwichensis)\*. Specimens of some of the rodents of the area were also secured.

The observer is grateful to a number of residents of the area for help with his work.

E. O. Höhn ASSOCIATE PROFESSOR DEPARTMENT OF PHYSIOLOGY UNIVERSITY OF ALBERTA <sup>1</sup>E. O. Höhn, 1967. Observations on the breeding biology of Wilson's phalarope (*Steganopus tricolor*) in central Alberta. *Auk*, 84: 220-44.

<sup>2</sup>H. L. Løvenskiold, 1964. Avifauna Svalbardensis. Oslo: Norsk Polarinstitutt. 460 pp. <sup>3</sup>D. O. Savile, 1951. Bird observations at Chesterfield Inlet Keewatin, in 1950. Canadian Field Naturalist, 65: 145-57.

<sup>4</sup>G. M. Sutton, 1931. Notes on birds observed along the west coast of Hudson Bay. *Condor*, 33: 154-59.

<sup>5</sup>E. O. Höhn, 1965. Die Wassertreter (The phalaropes). *Die Neue Brehm Bücherei, No.* 349. Wittenberg: A. Ziemsen. 60 pp.

## The Canadian Research Centre for Anthropology

The Centre (C.R.C.A.) was established in the early 1950's by Rev. Joseph E. Champagne, O.M.I., Director of the Institute of Missiology at the University of Ottawa, with the help of the National Museum of Canada. It now forms part of St. Paul University, a small private Catholic university run by the Oblates of Mary Immaculate. The Oblates have a long history of missionary work in the Canadian North. St. Paul University is federated with the University of Ottawa.

Until recently, the Centre functioned mainly as an informal clearing house for anthropological research in Canada. In the last two years, its research and publishing activities have been expanded. It has a particular interest in: social science and community development (socio-economic development and change) with specific emphasis on social, cultural, and applied anthropology; community development in large, sparsely populated frontier areas; and traditional peoples in situations of change and poverty. The geographic regions in which the Centre operates include the Canadian Middle North and Arctic, particularly the Yukon Territory and Northern Ontario. The northern research program is financed almost entirely by a grant from the Department of Indian Affairs and Northern Development under its program of assistance to northern institutes and expeditions.

The Centre has a vigorous publications program. It started in 1955 with the publication of *Anthropologica*, a bilingual journal in the social sciences, and has received support in the past from the Canada Council. The journal has carried a number of papers on the North. A special issue (Vol. V, No. 1, 1963) was devoted to "Community Organization and Pattern Change Among North Canadian and Alaskan Indians and Eskimos," In its monograph series, it has published: Eskimo Townsmen, a study of Eskimo adaptation to town life at Frobisher Bay, Baffin Island, by John and Irma Honigmann; The Metis of the Mackenzie District, a study of people of Indian and White ancestry in the Northwest Territories by Richard Slobodin; and Kabloona and Eskimo in the Central Keewatin, by Frank Vallee. This latter book, originally issued in report form by the Northerm Co-ordination and Research Centre, discusses White-Eskimo contact at Baker Lake, in the Barren Grounds of the Northwest Territories.

The first of the Centre's Document series dealt with "Community Development in Canada" and included reference to activities in northern Canada; it was written by Antony Loyd, now with the School of Social Work at the University of British Columbia. The Centre's Handbook series was initiated with Aleksandrs Sprudzs' *Co-operatives: Notes* for a Basic Information Course, which is a guide to establishing and running co-operatives, with particular reference to Eskimo co-operatives (see Review, p. 55).

The Centre issues a small bilingual monthly newsletter called "Information," which describes its activities.

The offices are at 40 Riverdale, Ottawa 1, Ontario, and visitors are always welcome. The mailing address is: St. Paul University, 223 Main Street, Ottawa 1, Ontario.

Jim Lotz ASSOCIATE DIRECTOR C.R.C.A.

## **Research Projects at Resolute**

## INTRODUCTION

In April 1967, an Arctic Research Group was formed within McMaster University's Department of Geography, with the object of undertaking closely integrated studies in all aspects of physical geography. As an introductory venture, a party of 3 professors, 2 graduate students, a photographic technician, and a seventeen-year-old Hamilton schoolboy who had been awarded a summer scholarship at McMaster arrived at Resolute on 29 June to undertake a 5-week program of research in coastal geomorphology, pedology, and sub-surface microclimatology.

Throughout the first half of July, the weather was remarkably poor, even for Resolute. Thick stratus cloud rolled inland from the south and west at ground level, and fieldwork within the study area of 100 square miles centred on the Resolute Air Base was impeded by visibilities which were only rarely as good as 500 feet. During the

first 15 days of the month, there were only 2 without precipitation. On 12 of those days, minimum temperatures failed to rise above 32°F., and on 6 and 12 July, the minima of 30.9°F. and 29.7°F. respectively established new low records for those dates. Maximum temperatures were also low, reaching 40°F. on only 3 occasions. On 14 July, the snow gauge at Resolute's meteorological station recorded a fall of 2.15 inches, and winds gusted up to 65 m.p.h. It must surely have been on just such a day that the following description of Cornwallis and its neighbouring islands was written: "More desolate, miserable, uninteresting and frightful regions do not exist on the surface of the globe."1

The weather improved considerably throughout the latter half of July. Minimum temperatures were then above 32°F. on all but 6 occasions, and there was only 1 day on which the maximum failed to reach as high as 40°F. However, precipitation was still recorded on all but 5 of the last 16 days, and the total of 2.87 inches for the month was nearly 3 times the normal figure of 0.97 inches. On 24 July, when 0.81 inches of rain fell, one member of the party entertained some of his very wet companions by presenting an extensively revised version of one of his regular lectures on arctic desert conditions.

In spite of all, a very satisfactory measure of progress was achieved, and the members of the party flew southwards on 3 August more than ever firmly convinced of the benefits that will result from a continuing close integration of their research interests.

## GEOMORPHOLOGY

The party's 2 geomorphologists undertook a general study of the raised shorelines within a 5-mile radius of Resolute, together with a detailed examination of the modern beach forms at selected points between Resolute Bay and the mouth of the Allen River.

An earlier examination of air photographs had revealed that raised shorelines constitute the dominant element of the landscape. In the field, an attempt was therefore made to define the major sequential stages in the formation of these features, in terms of their height above present sea level and their depositional history. To this end, an understanding of the processes operating on and the depositional forms occurring within the modern shore zone was a prerequisite, and thus the two major tasks which were undertaken were closely linked together. In particular, long-profiles across the sequence of raised shorelines, which were surveyed by standard methods of levelling, were complemented by numerous shorter profiles across the modern beaches.