where there are no sizeable urban centres and many scattered Eskimo and Aleut villages. In 7 election districts the Native village vote constitutes 75 per cent or more of the district total (nos. 12 [Aleutian Islands], 13 [Bristol Bay], 14 [Bethel], 15 [Yukon-Kuskokwim], 17 [Barrow-Kobuk], 18 [Nome], 19 [Wade-Hampton]). Seven state legislative representatives and 3 state senators are elected from these predominantly Native election districts (there is a total of 40 state representatives and 20 state senators). In 8 of the remaining 12 election districts the Native village vote constitutes 27 per cent or less of the total district vote (nos. 1 [Ketchikan-Prince of Wales], 2 [Wrangell-Petersburg], 3 [Sitka], 5 [Lynn Canal-Icy Straits], 6 [Cordova-Valdez], 10 [Kenai-Cook Inlet], 11 [Kodiak], 16 [Fairbanks-Fort Yukon]), and in 4 districts there are no predominantly Native precincts (nos. 4 [Juneau], [Palmer-Wasilla-Talkeetna], 8 [Anchorage], 9 [Seward]).

PARTY PREFERENCE OF NATIVE VILLAGES

Of the two major U.S. political parties, the Democratic party is clearly the stronger among rural Native voters in Alaska. (During the period 1960 to 1968, no candidate identified with a party other than the Democratic and Republican parties drew an appreciable vote.) In each election contest for U.S. president, state governor, U.S. representative and U.S. senator between 1960 and 1968 (5 general elections and 14 separate contests), the percentage of votes cast for Democratic candidates in the Native villages exceeded the percentage of votes cast for the same Democratic candidates in the state as a whole by an average of 12 percentage points. In none of the 14 single contests did the statewide electoral support for a Democratic candidate exceed the Native village electoral support.

Although the data show a clear over-all preference for the Democratic party in rural Native precincts, they also show that the patterns of party preference are not static. In 1968, for example, 60 villages (38 per cent of the total) registered a Republican or no clear party preference. This compares with 30 such Republican or competitive villages (19 per cent of the total number) in 1966, and only 11 (7 per cent of the total number) in 1964. Of the 54 villages which registered a Republican party preference in the five general elections between 1960 and 1968, 26 did so in only one of these elections. Of the 17 Eskimo villages that indicated a Republican party preference in 1960, only 9 did so again in 1968. The villages in individual election districts show different degrees of attachment to the dominant party. In the 1968 general election in the seven election districts controlled by Native voters, for example, villagers voted solidly Democratic in four districts (nos. 14 [Bethel], 17 [Barrow-Kobuk], 18 [Nome], 19 [Wade-Hampton]) and highly fragmented their vote along party lines in three districts (nos. 12 [Aleutian Islands], 13 [Bristol Bay], 15 [Yukon-Kuskokwim]).

The figures themselves offer no clues to the reasons for shifting party preference. Party loyalty may, in fact, be very weak in a number of villages; village voters may be influenced by important issues or strong personalities; or village voters may be receptive to intense local campaign efforts.

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Winter Observations of Mammals and Birds St. Matthew Island

Remote and uninhabited St. Matthew Island, lying 60°30′N. 172°30′W. on the continental shelf of the Bering Sea, is infrequently visited in summer and very rarely seen in the winter. The only signs of past human habitation are the wind-torn remains of a World War II naval observation station and the rectangular depressions of a couple of Eskimo house pits, of undetermined age, on the southwest side of the island. The last known visit to the island was during the summer of 1966.[1]

Our opportunity came on 6 and 7 February 1970, as a result of an oceanographic cruise aboard the U.S. Coast Guard icebreaker *Northwind* to study winter conditions in the ice-covered Bering Sea. At that time the island was covered with crusted, wind-glazed snow and locked in sea ice, with open water only along the south shore where large leads had opened up in the lee of the island. The weather was cold and very windy, temperatures ranging from 10°F. to −20°F. with a wind velocity averaging 30 to 40 knots, from the north.

The afternoon of the 6th was clear, permitting a helicopter survey of the entire island. Most of the daylight hours of the 7th were occupied by ground investigations of the island under worsening weather conditions (overcast sky and 40-knot wind).

The mammal population of the island is sparse (Table 1). We saw only arctic fox and reindeer, with no evidence of small mammals though they are known to exist there. One fox observed closely appeared to be very weak and listless, digging abjectly from time to time through the snow crust and hardly bothering to get out of the way of the helicopter.

TABLE 1. Species observed on or in the vicinity of St. Matthew.

Arctic Fox (*Alopex lagopus*)
Reindeer (*Rangifer tarandus*)
Walrus (*Odobenus rosmarus*)
Ringed Seal (*Phoca hispida*)
Snowy Owl (*Nyctea scandiaca*)
Thick-billed Murre (*Uria lomvia*)
Harlequin (*Histrionicus histrionicus*)
Common Eider (*Somateria mollissima*)
King Eider (*Somateria spectabilis*)
Oldsquaw (*Clangula hyemalis*)
Pelagic Cormorant (*Phalacrocorax pelagicus*)
Slaty-backed Gull (*Larus schistisagus*)
Glaucous-winged Gull (*Larus glaucescens*)
Glaucous Gull (*Larus hyperboreus*)
Ivory Gull (*Pagophila eburnea*)

We found a single herd of 32 reindeer at the southeast corner of the island. The animals were large and appeared to be in good condition, with impressive antlers. They are the remnant of a reindeer population introduced in 1944 that experienced a spectacular increase to 6,000 animals before crashing to 42 in the winter of 1963-64. Klein[2] visited St. Matthew in the summer of 1966 to study the remaining reindeer and collected 10 animals, including the last male. He left 32 animals, all thought to be female, and all of which survived the intervening three and a half years up to the time of our arrival on the island.

The observed marine mammal populations in the vicinity of St. Matthew proved to be disappointing. We had hoped and expected to find ringed seals, and perhaps ribbon seals, bearded seals, spotted seals, and walrus in the open leads in the lee of St. Matthew, but such did not prove to be the case. Ringed and bearded seals and walrus were observed some distance to the east of St. Matthew, in the edge of the sea ice in Bristol Bay; walrus were seen in large numbers north of the island, in the vicinity of St. Lawrence, so it seems likely that there should be marine mammals present in the area. It may be that the low temperatures and cutting wind prevented their appearance on top of the ice, where observations are normally made.

The bird fauna of St. Matthew and vicinity was more diverse than that of the mammal. Twelve species were seen around the island, all of which, with the exception of a snowy owl, were marine and were observed in the leads and polnyas of the sea ice. Most common were murres, harlequins, and oldsquaws.

Few birds were seen until the ship was within 30 miles of the island, after which murres and guillemots were seen with increasing frequency in the open leads. One snowy owl was observed flying low over the ice some distance east of the island. From the island we were able to see several rafts of harlequins and oldsquaws close to shore in the open water in the lee of the island. Farther out king and common eiders occurred in fair numbers, feeding in the open leads and flying restlessly back and forth, sometimes resting on the edge of the ice. One small flock of pelagic cormorants was seen flying offshore.

As the ship proceeded westward from St. Matthew toward the Siberian coast, murres, black guillemots, and 4 species of gulls were seen. Several slaty-backed and glaucous-winged gulls were seen, and 3 glaucous and 2 ivory gulls observed near 60°N., 175°W. It is interesting that of all the gulls seen, the slaty-back was by far the most common. This species is not considered common in Alaska.[3]

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Devon Island Programs 1970

INTRODUCTION

The Arctic Institute's research base on Devon Island was used by over twenty-five investigators and their field assistants during the 1970 summer field season, from late April to mid-September. There were two separately directed, but related, programs. One, a large integrated ecosystem study, was directed by L. C. Bliss of the University of Alberta and sponsored by the Canadian International Biological Program (IBP); the other was an Arctic Institute-sponsored comparative ecology project, under the direction of James A. Teeri.

Substantial improvements were made to the Base Camp (located in the Truelove Lowland), and a total of 8 Parkall and Jamesway huts are now available as sleeping quarters, laboratories, warehouse, kitchen, and storage areas. In addition, a separate field camp was established about 8 km. east of the base to facilitate the study of muskox, fox, and weasel. Local transportation was by two skidoo motortoboggans, a double-tracked Ranger V vehicle and trailer, and a Massey-Ferguson tractor and trailer. Transportation between Resolute and the Base Camp was by Otter and Beaver aircraft.

IBP TUNDRA BIOME PROGRAM*

The Devon Island Tundra Biome Project was initiated at the request of the International IBP Tundra Steering Committee. Following several planning meetings in 1969, the Arctic Institute's base on Devon Island was selected as the study site, for a number of reasons. Numerous studies, in a variety of disciplines, had been carried out in the area annually since 1960, and thus AINA's facilities and administrative experience were available to enable the project to go forward on relatively short notice. Also, the International Committee had urged that Canada select a high-arctic study site.

The study is being conducted in the Truelove Lowland, in the northeastern part of Devon Island (75°40′N., 84°40′W.). The area is bounded on two sides by 37 km. of shoreline. Salt lagoons account for 1 per cent of the land area. Maximum elevation is 65 m. The lowland contains 3 large lakes (Phalarope, the largest, is approximately 2.5 km. in length and 1 km. at its widest); 10 of medium size; and many small lakes and ponds. Open water occupies about 22 per cent of the surface. Raised beach ridges form a conspicuous feature, with a total extent of 9 per cent of the area. These ridges, often 2 m. to 10 m. above the surrounding lowlands, may extend for 1 or 2 kilometres in length and 20 m. to 200 m. in width. Outcrops of granite and calcareous rock occupy about 12 per cent of the lowland and rise no more than 20 m. above the surrounding land. Moist to wet meadows of sedges and grasses occupy the rest of the lowland (about 57 per cent).

Cliffs east and south of the lowland rise 250 m. to 300 m. to a plateau; the eastern portion is covered by a large icecap. A major effect of the cliffs is to draw prevailing winter winds into the lowland, which keeps the snow cover relatively constant. In spring the cliffs act as a heat sink and reflector, which results in a more rapid snow melt along the base and thus earlier use of the vegetation by muskox and snow geese. In spring and early summer katabatic winds or chinooks sweep in to the lowland, which greatly accelerates the rate of snowmelt.

Jones Sound is ice-covered except from August to October. This reduces the marine influence of fog and produces relatively higher summer temperatures. Permafrost underlies the entire area. Maximum depth of the active layer is 25 cm. to 30 cm. in the sedge meadows, and 75 cm. to 100 cm. on the raised beach ridges. Refreeze begins in late August. Ice wedge polygons on beach ridges, and unsorted and sorted rock circles, soil boils and solifluction terraces and lobes are quite common features, especially on the plateau.

The most common plant communities in the lowland are wet and mesic meadows of *Carex stans,* usually with considerable amounts of standing water early in the summer. Associated species, though typically present in minor numbers, are *Polygonum viviparum, Salix arctica,* and *Dryas integrifolia.* Mosses are abundant in many sites. Along the base of the cliff a more continuous cover of *Carex stans* occurs. Here the surface contains many mosses, and there is little open water in early summer. These communities are important habitat for musk-

*Contribution #2, IBP Devon Island Project.