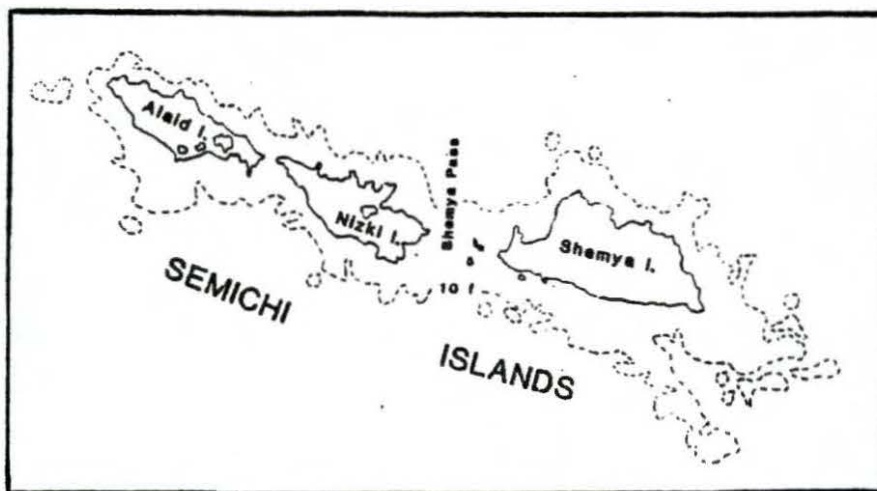


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BIRD AND MAMMAL OBSERVATIONS AT
ALCID AND NIZKI ISLANDS, ALEUTIAN ISLANDS, ALASKA
SPRING AND SUMMER 1976



by

JOHN L. TRAPP

On Reserve

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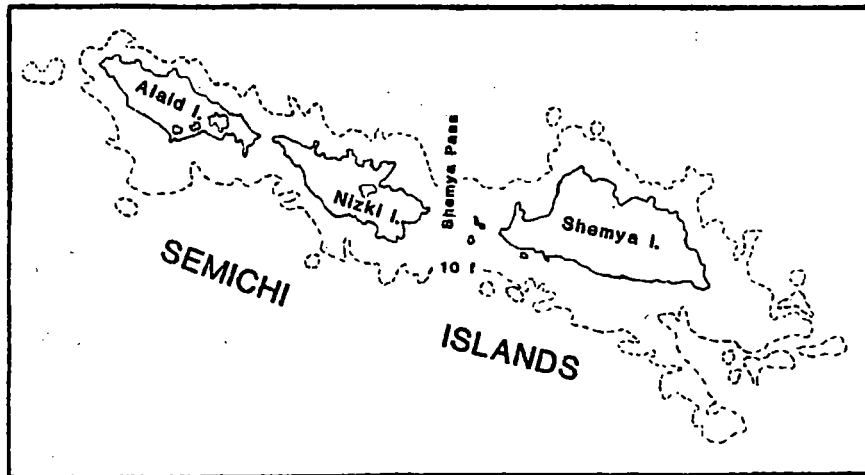
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Key Words: Birds, Mammals;
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TABLE OF CONTENTS

ABSTRACT	1
INTRODUCTION	2
STUDY AREA AND METHODS	3
ANNOTATED SPECIES LIST	4
Birds.	4
Confirmed or Probable Breeders.	4
Migrants and Visitants.	11
Mammals.	17
ACKNOWLEDGEMENTS	18
LITERATURE CITED	19
FIGURE	21
TABLES	22

ABSTRACT

This report provides detailed annotated accounts of 80 species of birds (including 24 confirmed or probable breeders and 56 migrants or visitants) and 5 species of mammals observed at Alaid and Nizki islands between 4 May and 14 July 1976. The status of breeding bird populations is documented to help assess the response of various species to the absence of arctic foxes (Alopex lagopus). The red-faced cormorant (Phalacrocorax urile) was the most abundant of the breeding seabirds with an estimated population of 3000 birds (2700 on Alaid and 300 on Nizki), while the lapland longspur (Calcarius lapponicus) was the most abundant of the breeding terrestrial birds with an estimated population of 1100 birds (500 on Alaid and 600 on Nizki). Dates of occurrence and numbers are summarized for all migrants and visitants. The following sightings are especially noteworthy: 1st Alaska record of the white-winged tern (Chlidonias leucopterus), 1st Aleutian Islands record of the snow goose (Anser caerulescens), 3rd Aleutian Island record of the hooded merganser (Lophodytes cucullatus), latest Aleutian Islands departure date on record for the whooper swan (Cygnus cygnus). The Steller's sea lion (Eumetopias jubata) population was estimated at 3000-3500 animals, down somewhat from the estimate of 4500-5400 in 1975. A sighting of 2 female sea otters (Enhydra lutris) with pups was the 1st recent record of the species in the Semichi Islands.

INTRODUCTION

Information on the fauna of Alaid and Nizki islands prior to 1975 is meager and largely qualitative (Turner 1885, 1886; Murre 1937, 1959; Jones in U. S. Fish and Wildlife Service 1970). However, in the late 1800's, Aleutian Canada geese (Branta canadensis leucopareia) were reportedly nesting on the islands of the Semichi Islands group by the "thousands" (Turner 1886). The lack of historical data on populations of other endemic species is unfortunate. Arctic foxes (Alopex lagopus), first introduced to the islands in 1911 (Gray 1937), soon established a thriving population which had supposedly detrimental (though unquantified) effects on the native avifauna.

Because of the historical importance of Alaid and Nizki islands as nesting grounds for Aleutian Canada geese, these two islands were chosen as future release sites for captive-reared birds as part of the effort to restore this endangered race as a breeding bird on selected islands in the Aleutian Islands. Following an unsuccessful eradication effort at Nizki in 1969 (Jones in U. S. Fish and Wildlife Service 1970, 1971) the U. S. Fish and Wildlife Service began trapping and shooting foxes on Alaid and Nizki in 1975 (Frank and Trapp 1975). Trapp (1975) provided the most complete recent account of the avifauna of Alaid and Nizki islands and documented the status of the breeding species at a time when the population of arctic foxes was high. Control efforts resulted in the complete elimination of foxes from both islands by 1976 (U. S. Fish and Wildlife Service 1979). Subsequently, there have been reports (Day et al. 1979; U. S. Fish and Wildlife Service 1980, 1983; Zeillemaker 1983) of changes in the distribution and abundance of several species of breeding seabirds compared to 1975-76, prior to fox removal (Trapp 1975, unpublished data).

The purpose of this report is to summarize observations on the status of bird and mammal populations in 1976. Some of this data, mostly observations of rare or unusual bird species of Asiatic origin, has appeared in the published literature (Gibson and Byrd 1976a and b; Byrd et al. 1978; Kessel and Gibson 1978; Trapp 1978b, 1979; Trapp in SOWLS et al. 1978).

STUDY AREA AND METHODS

Alaid and Nizki islands, collectively (along with Shemya Island) referred to as the Semichi Islands, are located in the Near Islands group of the western Aleutian Islands (Figure 1). Detailed descriptions are found in Trapp (1975) and Day et al. (1979).

David G. Kelleyhouse, Mark A. Snigaroff, John L. Trapp, and Loren Viers spent 37 days on the islands, 4-26 May, 28 May-5 June and 10-14 July 1976. The primary objective of their visits was to search for and destroy arctic foxes. They also made detailed notes on the distribution, abundance and behavior of all birds and mammals observed. All habitat types on all portions of both islands were visited at least once.

ANNOTATED SPECIES LIST

Birds

A total of 80 species of birds were identified at Alaid and Nizki in 1976 (2 on the basis of carcasses only); 24 of these were considered to be confirmed or probable breeders (Table 1) and the remaining 56 were migrants and visitants.

Confirmed or Probable Breeders

Gavia stellata. Red-throated Loon. This species was not recorded until 30 May, on which date a bird was heard calling in flight above Lake Sterna. One pair was observed on a small pond at the east end of Alaid on 14 July.

Gavia immer. Common Loon. One pair was present on Lake Sterna upon our arrival and remained throughout the month. They undoubtedly nested on the island in Lake Sterna, the site of a nest in 1975 (Trapp 1975). One pair was also present on South Lake throughout the period. They were frequently observed near the island and undoubtedly nested there. A single loon observed on Midden Lake on several occasions may have been a member of either the South Lake or Lake Sterna pair, or may have been an unmated bird. On Nizki, I observed an adult with 2 downy young on Canyon Lake on 12 July and recorded the following behavior: "Adult gave distraction display. Head pulled back to rest on upper back. Bill elevated. Breast raised out of water. Held this position for 1-2 seconds while paddling on surface with feet. After paddling the bird dropped back down on the water with a splash. Upon hitting the water it continued rolling forward, dipping its head and neck in the water several times, all the while uttering a loud, frantic call. Young still downy. Black on head and neck. Back and sides more of a charcoal gray. Second adult flies to lake from direction of south coast and joins family group. Young spent most of time below surface, coming to surface only briefly for air."

Phalacrocorax pelagicus. Pelagic Cormorant. This species nested on both islands but in much smaller numbers than the red-faced cormorant (P. urile). Of all active cormorant nests located on the 2 islands (n = 1151), just 5.6% (65) belonged to this species. Breeding phenology appeared to be somewhat later than that of the red-faced cormorant, with the 1st birds noted on nests on 13 May. Nests were distributed as follows: Alaid--6 nests at Puffin Point, 7 nests on rocky outcropping at the northeast tip of island, 3 nests near ARMY, and 7 nests at NINA; Nizki--1 nest on southwest side of island, 29 nests on north side between west end and Jones Cove, and 12 nests in the vicinity of Jones Cove. There were undoubtedly other nests scattered around the rocky perimeters of the 2 islands which I failed to detect. The total breeding population was estimated at 100-150 pairs.

Phalacrocorax urile. Red-faced Cormorant. This was the most abundant of the breeding seabirds at Alaid and Nizki. Nesting activities were well advanced upon our arrival on 4 May, with most birds either actively gathering nest material or sitting on completed nests. On 5 May, I observed 28 cormorants sitting on a hillside east of Trapp Cove where they had been gathering vegetation; the hillside had been almost completely denuded by their activities. The 1086 nests were distributed as follows: Alaid--5 nests on the west side of Puffin Point, 10 nests on the inner side of Gull Island, 8 nests on a rock north of ARMY, 893 nests in the vicinity of NINA and Cormorant Cape, and 10 nests on the inner side of Leaning Rock (additionally, a substantial number of nests were believed to have been present between Cormorant Cape and Alaid Head, an area which could not be searched thoroughly for nests); Nizki--33 nests on southwest side of island, 11 nests on north side between west end and Jones Cove, 52 nests in vicinity of Jones Cove, and 73 nests east of Jones Cove. The total breeding population for both islands was estimated at about 3000 birds. Nearshore Waters west and north of Alaid were important foraging areas for red-faced cormorants in 1976. On 11 July, a feeding flock of 1200-1500 birds was noted 0.8 km off Alaid Head, and another flock of about 500 birds was noted 1.6 km north of Alaid. A limited amount of data on productivity was gathered at previously undisturbed colonies on Nizki in mid-July. On average, it appeared that about 65.6% of all nest attempts (n = 61) produced at least 1 near-fledged young; nest success varied greatly among subcolonies, ranging from 24.4-69.7%. Successful nests (n = 26) contained an average of 2.5 young per nest (mode and median = 3). Trapp (1978a and b), using data from Alaid, Nizki and Agattu islands, demonstrated that repeated human disturbance could significantly lower nesting success and the number of young fledged per successful nest; the ultimate factor was increased predation on exposed eggs and nestlings by glaucous-winged gulls (Larus glaucescens).

Anas crecca. Green-winged Teal. This species was recorded regularly in small numbers (n = 22; 9 sightings). The maximum daily count was 4 birds (2 pairs) on 30 May. Two or 3 pairs probably nested among the lakes at the east end of Alaid.

Anas platyrhynchos. Mallard. Mallards were recorded in small numbers throughout the period, with a maximum count of 9 individuals on 17 May. Overall, the sex ratio was 1.62 males/female (61.8% male; n = 68). Prior to 14 May the ratio of males to females was 17 to 13, while after that date it was 25 to 13; this may indicate that females began incubating clutches about mid-May. Three or 4 pairs probably nested among the lakes at the east end of Alaid. A female with 7-8 ducklings was noted on Lake Sterna on 10 July.

Somateria mollissima. Common Eider. The common eider was the most abundant species of waterfowl occurring on the islands, and was most frequently encountered along the reefs and rocky coastlines. The eider population was estimated at 300 on Alaid and 400 on Nizki, but the number of breeding birds was probably less than 10% of these figures. Eiders began to appear inland during the last week in May. A pair was sitting

in Empetrum cladonia on 23 May; 3 pairs were seen on Lake Sterna on 26 May; 3 birds were sitting on the island in South Lake on 30 May; and 14 birds were present at the latter location on 31 May. No nests or young were found on Alaid. The regular occurrence of birds sitting on the island in South Lake during late May and early June, with up to 14 birds (10 males, 4 females) seen 31 May, is evidence that they probably nested there. Eiders nested at the east end of Nizki in small numbers, probably an early response to the reduction of foxes on that island. A nest found at the extreme east end of Nizki on 31 May was located in Elymus arenarius cover at the top of a 12 m coastal bluff and contained 2 eggs. Seven broods observed along the north coast of Nizki on 12 July contained an average of 4.1 young (range 3-6). Six of the broods were composed of Class I ducklings, while the remaining brood was Class II or III. Five broods were accompanied by single females, while 2 broods were each accompanied by 2 females. The average size of 171 flocks noted 5 May to 3 June was 2.4 (range 1-12) and the mode was 2. Ninety percent of the flocks contained fewer than 5 individuals. Males comprised 62.0% (1.6 males/female) of the individuals recorded during the period (n = 355); only 3.6% of 220 males observed were immatures. During the period 12-14 July, the 24 flocks noted averaged 3.1 individuals (range 1-13) and the mode was 1. Males comprised 78.6% (3.7 males/female) of the individuals recorded in mid-July (n = 75); no immature males were recorded.

Falco peregrinus. Peregrine Falcon. One bird observed near Midden Lake on 5 May and a female noted along the southeast coast of Alaid on 18 May were the only observations. We found no evidence of nesting, but I suspected that an eyrie existed at Cormorant Cape or Alaid Head (see Trapp 1975).

Calidris ptilocnemis. Rock Sandpiper. Few notes were made on this species but it was observed with some regularity, both in the Empetrum-Cladonia tundra and along the rocky coastline. Rock sandpipers were specifically noted at Alaid on at least 13 of 24 days during May. Maximum daily count was 5 birds on 3 different dates. Two territorial pairs were encountered on 8 May. This species was also observed at Nizki.

Stercorarius parasiticus. Parasitic Jaeger. Parasitic jaegers were present on Alaid and Nizki in very small numbers during the summer. The first bird was observed at Alaid on 19 May, and they were observed irregularly thereafter. No more than 2 birds were seen daily. On 12 July a pair of jaegers was observed harassing an arctic tern (Sterna hirundo) carrying a fish in its bill. The ratio of dark- to intermediate- to light-phase birds was 7:1:0. A maximum of 2-3 pairs may have nested on each island.

Larus glaucescens. Glaucous-winged Gull. As in 1975, this species was widespread and ubiquitous on both islands. One bird was observed gathering dead vegetation at East Marsh on 7 May. On 13 May, several gulls flew from the direction of East Marsh towards Gull Island with large masses of vegetation in their bills. The following nesting concentrations were noted at Alaid: Leaning Rock--21 nests on 22 May;

Gull Island--estimated 75 pairs in mid-May (maximum count of 101 adults on 13 May); north shore--24 nests on offshore rocks in the vicinity of NINA. Additional birds probably nested on the cliffs of the north side and at Alaid Head. The total breeding population of the island was probably about 150 pairs. A substantial population of 1- and 2-year-old birds was also present, as evidenced by a count of 242 immature birds on 15 May. Immatures were most frequently encountered in the vicinity of Steller's sea lion (Eumetopias jubata) haulout areas, where they apparently fed on sea lion fecal material (Trapp 1978). On 14 July, we found a nest with a single egg on the beach ridge at the northeast tip of Alaid. The egg was pipped and a chick was calling inside the egg. A few sparse stems of Elymus arenarius was the only protective cover in the vicinity of the nest. This perhaps represented an early response to the elimination of foxes from Alaid. Gulls appeared to be less abundant on Nizki than on Alaid, with the following nesting concentrations noted: west end--estimated 10 pairs (maximum count of 10-15 adults on 14 July), east end--estimated 15 pairs (maximum count of 15-20 adults--acting territorial--on 12 July), north shore--maximum of 20 pairs on offshore rocks and sea stacks along 0.8 km of shoreline near Jones Cove. On 12 July, we tallied 26 adult gulls along the north coast between Jones Cove and the east end of the island, but found no evidence of nesting. Similarly, no nesting activity was detected along the entire south coast. The total breeding population probably did not exceed 75 pairs. Trapp (1978) examined 875 regurgitated gull pellets at Alaid and Nizki and found that they were feeding almost exclusively on invertebrates. The most important food items were sea urchins (Strongylocentrotus polyacanthus), 80.1% frequency of occurrence; chitons (Katharina tunicata), 8.0%; Steller's sea lion excreta, 6.6%; unidentified barnacles (Balanus spp.), 5.8%; blue mussels (Mytilus edulis), 2.5%; limpets (Acmaea spp.), 1.9%; and periwinkles (Littorhina spp.), 1.5%.

Rissa tridactyla. Black-legged Kittiwake. The small colony on the west side of Cormorant Cape contained 100 + 25 nests on 25 May; the nests were restricted to the lower-most 30 m of the cliff face. We saw no additional colonies at Alaid or Nizki. As in 1975, small numbers of birds bathed daily in Lake Sterna. The total breeding population for the two islands probably did not exceed 250 birds.

Sterna paradisaea. Arctic Tern. This species was first noted on 24 May, when 4 birds were present at Lake Sterna. As in 1975, they nested on the islet in the northwestern portion of Lake Sterna, but in greatly reduced numbers. The maximum daily count there was 5 birds on 31 May and none were present on 14 July, suggesting that they did not nest successfully. On 12 July, a colony of about 20-25 pairs was found nesting on the easternmost, Calamagrostis-covered, island in Eider Lake, Nizki. Also on 12 July, an arctic tern was observed flying just west of Canyon Lake, Nizki with a fish in its bill; it was being pursued by a pair of parasitic jaegers.

Sterna aleutica. Aleutian Tern. On 12 July, an adult was flushed from a nest southeast of Eider Lake, Nizki. The nest was located at an elevation of 50 m. It was a mere depression in Empetrum-Calamagrostis-Carex tundra, with

the only cover being a few sparse stems of Carex. The nest contained 1 egg and 2 adults were flying about the vicinity. A few pairs, perhaps 5-10, appeared to be nesting in association with arctic terns on the easternmost island in Eider Lake.

Cepphus columba. Pigeon Guillemot. Small numbers were observed regularly during May at 2 locations along the south shore of Alaid, with a maximum count of 3 birds in Trapp Cove on 24 May. These low numbers suggest 10 or fewer breeding pairs in this area. Pigeon guillemots were not observed elsewhere on Alaid, nor were they recorded at Nizki despite an abundance of apparently suitable breeding habitat.

Synthliboramphus antiquus. Ancient Murrelet. Scattered observations of this species in Nearshore Waters near Alaid (e.g. 3 birds in Nizki Cove on 4 May, 4 birds 150-200 m off the north coast on 5 May, 1 in Trapp Cove on 7 May, 6 in Nizki Cove on 24 May, 15 along north coast on 26 May) suggest that a small breeding population may have persisted on inaccessible slopes such as those at Alaid Head. One bird was observed about 0.8 km off Jones Cove, Nizki on 4 June.

Fratercula cirrhata. Tufted Puffin. Tufted puffins were present upon our arrival the 1st week of May and were recorded regularly in small numbers on both islands. Birds were observed at 5 locations on Alaid, and their presence was suspected at a 6th:

Puffin Point.--A few puffins nested atop an Elymus-covered sea stack located just off the Point. Birds were not observed on the adjacent main island. I counted 5, 0, 2 and 2 puffins on 5, 6, 8 and 9 May, respectively. These counts are all well below the high count of 18 birds on 1 July 1975 (Trapp 1975). The breeding population was estimated at 10-20 birds.

ARMY.--One bird was seen here on 7 May. No birds were recorded here in 1975 (Trapp 1975). The bluffs at ARMY appear to provide suitable tufted puffin breeding habitat and the species may have been expanding into this area as a response to the elimination of arctic foxes.

NINA and Cormorant Cape.--Puffins nested on 2 sea stacks (1 on each side of NINA) as well as on the sheer rocky cliffs where cracks in the rock apparently offered suitable nest sites. In 1975, a few birds were noted nesting in the sea stack on the east side of NINA (Trapp 1975). I counted 10-20, "a few", 6 and 15 birds on 10, 13, 22 and 25 May, respectively. The breeding population was estimated at 25-50 birds.

Northwest Cove.--As in 1975 (Trapp 1975), a large sea stack on the west side of Northwest Cove was the site of the largest concentration of this species. I counted 32+ birds on 22 May and about 500 birds on 11 July. The breeding population at this site was estimated at 750-1,000 birds. In addition, scattered pairs probably nested along the tall cliffs between NINA and Northwest Cove

Southwest Point.--A few tufted puffins were noted about the steep, vegetated sea slopes opposite Leaning Rock. I counted 3 birds on 22 May, a "small number" on 11 July, and 4-5 on 14 July. The breeding population was estimated at 10-20 birds.

Alaid Head.--Although not specifically noted here, it is suspected that a few puffins nested on the steep, vegetated slopes of Alaid Head. The breeding population is "guestimated" at 100-500 birds.

Tufted puffin breeding populations are difficult to determine accurately without systematically counting burrows. However, based on visual observations of birds at the 6 sites, I believe the 1976 breeding population was approximately 600 + 200 pairs with the majority (about 75%) of these found at the Northwest Cove colony. If high and low estimates from 1975 (Trapp 1975) are averaged, the average population that year was about 330 birds. It is unlikely that the population doubled between 1975 and 1976; rather, the discrepancy in the two estimates is probably due largely to the difficulty of obtaining accurate estimates of this species without doing systematic burrow counts. Scattered pairs nested on offshore islands and sea stacks along the north side of Nizki, primarily between the west end and Jones Cove. The population in this area is "guestimated" at 200 birds.

Fratercula corniculata. Horned Puffin. This species was recorded in very small numbers on both islands. At Alaid we observed 4-5 birds off Puffin Point on 24 May, 4 birds east of NINA on 24 May, and 1-2 birds at the southwest end on 11 July. Scattered birds were observed along the north coast between Alaid Head and Cormorant Cape in 1975 (Trapp 1975) and, even though we had few specific sightings, I believe that most of the breeding population was centered in this area in 1976 also. The breeding population was estimated at 50-100 birds. The north side of Nizki, particularly in the vicinity of Jones Cove, offered suitable nesting habitat and horned puffins probably nested there in small numbers. We found no horned puffins nesting along the south side of Nizki.

Corvus corax. Common Raven. This species was observed infrequently; it was specifically recorded at Alaid on 12 of 32 days between 4 May and 5 June. Most observations were in the central portion of the island or along the cliffs of the north coast and involved 1 or 2 birds. On 25 May I encountered 2 adults and 1 fledgling atop a cliff just west of NINA. The adults had very ragged primaries, secondaries and rectrices. The fledgling took flight upon my approach. It is likely that a pair nested somewhere in this vicinity. We found no evidence of nesting elsewhere on Alaid or on Nizki.

Troglodytes troglodytes. Winter Wren. The winter wren was considered to be "common" to "abundant" in suitable habitat at Alaid, where it was specifically recorded on 14 days in May. As in 1975 (Trapp 1975), it was essentially restricted to boulder and cobble beaches in the vicinity of cliffs. It was recorded in similar situations, and in comparable densities, on Nizki. Nesting was presumed on the basis of singing males in apparently suitable habitat. Of the 3 most common species of passerines inhabiting the cobble

beach-boulder-cliff niche, the proportional distribution of birds on beach transects (n = 49; data from 1975--Trapp unpublished data) was as follows: song sparrow (Melospiza melodia) 47%, winter wren 27%, snow bunting (Plectrophenax nivalis) 27%.

Melospiza melodia. Song Sparrow. Fairly common along the coastline of both islands, song sparrows were encountered most frequently on beaches of boulders or rocks, and in cliff areas; they were frequently noted as "common", "numerous", or "abundant." Five nests were found: 1 with 3 eggs on 13 May, 1 with 4 eggs on 15 May, 1 with 4 eggs on 29 May, 1 with 2 eggs and 2 young on 29 May, and 1 with 4 eggs on 30 May.

Calcarius lapponicus. Lapland Longspur. One longspur was heard on 4 May (my first day on the island), one male was seen in flight on 5 May, 20 males were observed on 7 May, and they were recorded as "abundant" on 9 May and subsequent dates; the 1st female was observed on 12 May. Gibson's (1981) earliest arrival date at Shemya was 2 May and he noted that females arrived about 1 week after males. In 1975, permanent line transects were established (3 on Alaid and 2 on Nizki) to assess the size of longspur populations. The breeding densities extrapolated from the transects (1.8-2.2 pairs/ha; Table 1) seem high in comparison to White et al.'s (1977) estimate (from census plots) of 0.9 pairs/ha on fox-free Amchitka. My estimates may be exaggerated by the inclusion of birds which were actually further than 15.24 m from the observer. Nevertheless, the population index (males within 15.24 m) should provide a reasonably accurate means for assessing relative population changes. If White et al.'s (1977) more conservative figure of 0.9 pairs/ha is applied to Alaid and Nizki, we arrive at an estimate of about 250 pairs on Alaid and 300 pairs on Nizki. No nests were found, but 3 recently-fledged young were observed at Nizki on 12 July.

Plectrophenax nivalis. Snow Bunting. Snow buntings were present on both islands, but were the 2nd least abundant of the small breeding passerines (only the rosy finch (Leucosticte arctoa) was less numerous). They were most frequently encountered along areas of cliff and rocky shoreline. At Alaid, they were seen most often at ARMY, NINA, Cormorant Cape, and Alaid Head. Four or 5 birds were engaged in a territorial dispute at NINA on 13 May, and numerous fledglings were seen along the north coast of Nizki on 12 July; the largest group contained 4 birds.

Leucosticte arctoa. Rosy Finch. This decidedly uncommon species was noted on only 3 occasions at Alaid (3 females near NINA on 10 May, 1 bird near NINA on 13 May, and 1 pair near the wreckage of the WW II bomber on the east slope of Mammary Mountain on 25 May) and not at all at Nizki. Breeding was assumed merely by the presence of birds in suitable breeding habitat. The breeding population must have been limited to 2-3 pairs. This species was not recorded in 1975 (Trapp 1975).

Migrants and Visitants

Podiceps auritus. Horned Grebe. Two breeding-plumaged birds in Nizki Cove on 5 and 23 May (the latter observation was by George E. "Terry" Hall and Michael A. Spindler).

Podiceps grisegena. Red-necked Grebe. Five were seen in Nizki Cove on 23 May (Hall and Spindler) and 2 were recorded at the same locality on the following day.

Fulmarus glacialis. Northern Fulmar. The remains of one bird were found on the south coast of Alaid. This species occurred regularly offshore during the summer.

Puffinus griseus. Sooty Shearwater. One bird was encountered 1.6 km north of Alaid on 11 July.

Oceanodromus furcata. Fork-tailed Storm-Petrel. The remains of a single bird were found on Alaid Head. We could not confirm that this species was nesting at Alaid, but it may be present in very small numbers in some of the more inaccessible parts of the island (cf. Trapp 1975).

Cygnus cygnus. Whooper Swan. A flock of 6 birds was observed flying over Lake Sterna in a westerly direction on 8 May. They were last seen in the vicinity of Mammary Mountain at an elevation of about 100-200 m. The flock appeared to be a family group consisting of 2 adults and 4 yearlings. This represented the latest Aleutian Islands departure date on record (Gibson and Byrd 1976a, Kessel and Gibson 1978).

Anser fabalis. Bean Goose. Single birds, probably different individuals in each case, were observed in the vicinity of South Lake on 13, 26 and 30 May (Gibson and Byrd 1976a, Byrd et al. 1978).

Anser caerulescens. Snow Goose. On 11 July, Kelleyhouse and Snigaroff observed an adult snow goose in flight over Lake Sterna, Alaid. Detailed notes on this sighting were provided by Kelleyhouse. This represented the first record of this species in the Aleutian Islands (Gibson and Byrd 1976b).

Chen canagica. Emperor Goose. A total of 8 late stragglers, including 2 birds sitting on the island in South Lake, were observed along the south coast of Alaid on 17 May.

Anas acuta. Northern Pintail. This species was recorded daily in good numbers (average of 11.1 birds/day) 4-15 May at Alaid, but was irregular thereafter (average of 1.2/day; latest was 3 pairs on 30 May). High count: 21 birds on 5 May. Males outnumbered females 1.70 to 1 (n = 108). This species breeds elsewhere in the Aleutians in small numbers, and it is likely that it will do so at Alaid and Nizki in the near future.

Anas penelope. Eurasian Wigeon. Birds were observed regularly at Alaid, 13 May-3 June, with a total of 52 birds recorded on 8 dates (most were found in tide pools on the south side of Alaid); maximum count was 14 birds on 20 May.

Three birds were seen on a pond at the east end of Nizki on 3 June. The overall sex ratio was 0.85 males/female (n = 55).

Aythya ferina. Common Pochard. One female at Lake Sterna in association with common goldeneye (Bucephala clangula) on 12 May, one female at Midden Pond in association with greater scaup (Aythya marila) on 7 May and two females at Midden Lake 19-22 May.

Aythya fuligula. Tufted Duck. A total of 25 birds was recorded at Alaid on 9 dates between 17 May and 1 June (most were found on West Lake, but 1 female remained on a pond at the east end of the island from 24 May-1 June); the maximum count was 9 birds on 22 May and the sex ratio was 0.67 males/female (n = 25).

Aythya marila. Greater Scaup. This species was recorded irregularly and in small numbers at Alaid, with a total of 17 birds recorded on 8 days between 5 and 22 May (maximum count: 5 birds on 5 May; males were slightly (5:7) outnumbered by females). A flock of 8 birds (4 males and 4 females) was observed at Duck Pond, Nizki on 31 May, and 3 birds (2 males and 1 female) were observed there on 3 June.

Histrionicus histrionicus. Harlequin Duck. This species was present in moderate numbers throughout the period. Maximum daily count was 74 birds on 5 May. The sex ratio was essentially equal: 52.0% males, or 1.09 males/female (n = 280). Flock sizes ranged from 1 to 35 and averaged 3.8 individuals; the modal flock size was 2 (n = 88).

Clangula hyemalis. Oldsquaw. Two breeding-plumaged birds in Trapp Cove, Alaid on 7 May was the only observation of this species.

Melanitta nigra. Black Scoter. One female off the northeast coast of Alaid on 13 May was the only observation.

Bucephala clangula. Common Goldeneye. Common goldeneyes were observed daily through 17 May, but infrequently thereafter. The maximum count was 7 birds on 6 May. A total of 45 individuals was observed on 15 dates. Males were outnumbered by females 1 to 1.62 (61.8% females; n = 34).

Lophodytes cucullatus. Hooded Merganser. One female was present at Alaid 5-22 May; it was recorded on 8 dates and was observed at both East Marsh and Midden Lake. On 2 occasions it was associated with a male common goldeneye. These observations provided the 3rd Aleutian Islands record of this species (Gibson and Byrd 1976a). A report of 1 male and 2 females at Duck Pond, Nizki on 31 May (Viers) was not confirmed.

Mergus merganser. Common Merganser. Four observations: 1 female near Lake Sterna, Alaid on 5 May, 2 females at Lake Sterna, Alaid on 12 May, 1 female at Transect Lake, Alaid on 15 May and 1 female on 17 May.

Mergus serrator. Red-breasted Merganser. A total of 25 birds was recorded on 8 dates between 4 May and 3 June at Alaid. Males were greatly outnumbered by females (2:23).

Buteo lagopus. Rough-legged Hawk. A single light-phase bird was noted at the east end of Alaid on 20 May.

Pluvialis dominica. Lesser Golden-Plover. Single birds were noted at Alaid on 13 and 17 May.

Charadrius mongolus. Mongolian Plover. Three breeding-plumaged Mongolian Plovers were observed among the rocks on the south coast of Alaid on 17 May.

Tringa nebularia. Common Greenshank. Two birds were observed feeding in a tidal pool on the south side of Alaid 17 May, single birds were noted at the east end of the island 23-24 May, and 1 bird was seen along the rocky northern coast on 3 June (Byrd et al. 1978).

Tringa erythropus. Spotted Redshank. A very wary bird was present on the shore of South Lake, Alaid, 22-23 May (Byrd et al. 1978, Kessel and Gibson 1978).

Tringa glareola. Wood Sandpiper. Wood Sandpipers were first observed on 12 May with the arrival of a flock of 15 birds at Alaid. Subsequently, birds were noted daily from 14 May to 22 May, with occasional birds (maximum of 2 per day) observed through 3 June. Peak numbers occurred during the period 14-22 May with 5, 23, 123, 4, 42, 24, 19 and 17 birds observed on 14, 15, 17, 18, 19, 20, 21 and 22 May, respectively. One bird observed at East Marsh, Alaid on 14 July was unusual for that time of year. Most birds were observed in marshy situations (i.e. The Empetrum-Calamagrostis-Carex complex of East Marsh, or the Calamagrostis borders of South and Midden lakes), but occasional birds were observed feeding in patches of kelp washed onto the south beach.

Heteroscelus incanus. Wandering Tattler. Three birds at the east end of Nizki on 30 May, 1 at Trapp Cove, Alaid on 1 June, and 1 on the north side of Nizki on 3 June were the only observations.

Heteroscelus brevipes. Gray-tailed Tattler. Four birds were observed at Nizki on 3 June: 1 along the north coast and 3 at the east end (Byrd et al. 1978).

Actitis hypoleucos. Common Sandpiper. A single bird was noted among kelp-covered rocks on the south coast of Alaid 22-23 May, and 1 was observed at the east end of Nizki on 30 May (Byrd et al. 1978).

Numenius sp. Unidentified Curlew. On 22 May a large, unidentified curlew was observed on the tundra west of West Lake. The following notes were made at the time of the sighting: "Appeared larger than whimbrel; no white on lower back. Bill extremely long and strongly down-curved. Crown bright rufous. Light above eye. Back and upper tail coverts appeared to be light brown or

tan in color. Upon taking flight gave a weak 'teeuw-teeuw-teeuw' call; very high-pitched whistle".

Limosa limosa. Black-tailed Godwit. A single individual was flushed from East Marsh, Alaïd on 30 May (Byrd et al. 1978).

Limosa lapponica. Bar-tailed Godwit. One bird was observed on the gravel beach at Jones Cove, Nizki on 28 May.

Arenaria interpres. Ruddy Turnstone. A flock of 20 birds was noted feeding in the grass on the shore of South Lake, Alaïd on 19 May, and flocks of 7 and 4 were seen at Nizki on 23 May and 3 June, respectively.

Calidris alba. Sanderling. One breeding-plumaged bird was observed with a dunlin (C. alpina) on a sandy beach on the southeast side of Alaïd on 19 May.

Calidris ruficollis. Rufous-necked Stint. Single birds were observed on the south coast of Alaïd on 19 and 23 May (Byrd et al. 1978), and on the north coast of Nizki on 3 June.

Calidris subminuta. Long-toed Stint. Long-toed stints were observed from 15-31 May, with a maximum of 8 birds on 19 May (Gibson and Byrd 1976a). Birds were observed daily through 22 May, but were noted infrequently thereafter. They were encountered along the grassy shores of South and Midden lakes, and in East Marsh.

Calidris alpina. Dunlin. This species was observed regularly at Alaïd 15-25 May, with numbers recorded as follows: 3 on 15 May, 24 on 17 May, 2 on 18 May, 12 on 19 May, 3 on 20 May, and 1 on 25 May. Birds were most frequently encountered in East Marsh and along the grassy shores of South and Midden lakes. One was seen at the east end of Nizki on 3 June.

Gallinago gallinago. Common Snipe. Common snipe were recorded at Alaïd 14-22 May, with a maximum daily count of 15 birds on 17 May (Byrd et al. 1978). Six birds were recorded 19 May, 5 on 20 May, and no more than 2 daily on the other dates. Snipe were encountered in the marshy Empetrum-Calamagrostis-Carex community in East Marsh, and along the grassy shores of South and Midden lakes.

Stercorarius pomarinus. Pomarine Jaeger. Pomarine jaegers occurred in small numbers in the marine waters surrounding Alaïd and Nizki during the summer months. Single light-phase birds were observed about 1.6 km north of Nizki on 28 May and 11 July.

Larus argentatus. Herring Gull. One 1st-year bird was observed at Alaïd on 17 May.

Larus hyperboreus. Glaucous Gull. Single 2nd-year birds were observed on 12 and 15 May, and 2nd-year birds were noted along the south coast of Alaïd on 22 May. A 2nd-year bird found caught in a fox trap at Alaïd on 19 May was released unharmed.

Chlidonias leucopterus. White-winged Tern. An adult male collected near Eider Lake, Nizki, on 12 July was the 1st Alaska record of this central and eastern palearctic tern (Gibson and Byrd 1976b, Byrd et al. 1978, Kessel and Gibson 1978).

Uria aalge. Common Murre. This species was probably common in Nearshore Waters surrounding Alaid and Nizki. We recorded 40-50 birds 1.6 km off Alaid on 26 May, 4 birds 1.6 km off Jones Cove, Nizki on 4 June, and 15 birds 0.8 km off Cormorant Cape, Alaid on 5 June. No evidence of breeding was recorded even though the cliffs at Cormorant Cape appear to provide suitable habitat.

Uria lomvia. Thick-billed Murre. Apparently uncommon in Nearshore Waters surrounding Alaid and Nizki. It was recorded on one occasion: 9 birds about 1.6 km off North Cove on 25 June.

Cyclorhynchus psittacula. Parakeet Auklet. One bird about 0.8 km off Jones Cove, Nizki, was our only observation of this species; as in 1975, we found no evidence of nesting.

Aethia cristatella. Crested Auklet. Two birds were observed just north of Shemya Pass on 4 June.

Asio flammeus. Short-eared Owl. Single birds, perhaps the same individual in each instance, were observed at various locations on Alaid on 4 occasions: 8, 10, 15 and 30 May.

Phylloscopus borealis. Arctic Warbler. One bird was noted on the north coast of Nizki on 3 June as it flitted about on a bare rock on the shore.

Luscinia calliope. Siberian Ruby throat. A male was observed at Nizki on 3 June along a stream valley where the ground had recently been exposed by melting snow (Gibson and Byrd 1976b, Byrd et al. 1978, Kessel and Gibson 1978).

Turdus obscurus. Eye-browed Thrush. This species was recorded on several occasions during the last 2 weeks of May and the 1st week of June. A very wary bird was observed on South Midden, Alaid, on 17 May, a female was observed at the same location on 19 May, a male was seen on a sea slope on the north side on 22 May, 1 male on a coastal bluff at the west end on 25 May, a male was seen at Nizki on 31 May (Viers), and 2 birds were seen along the north shore of Nizki on 3 June (Byrd et al. 1978, Kessel and Gibson 1978).

Motacilla flava. Yellow Wagtail. Yellow wagtails were recorded at Alaid and Nizki, 15-31 May; a total of 167 birds was seen on 11 dates during this period. High counts were 72 on 15 May and 50 on 17 May; subsequently, numbers declined rapidly with no more than 10 being recorded daily. The 72 birds on 15 May was the maximum count of this species in the western Aleutian Islands in 1976 (Gibson and Byrd 1976a).

Motacilla alba. White Wagtail. One gray-backed bird at the extreme east end of Alaid on 13 May was the only observation (Byrd et al. 1978).

Anthus spinoletta. Water Pipit. One, 3 and 2 birds on 14, 15 and 17 May, respectively, at Alaid, were the only observations.

Emberiza rustica. Rustic Bunting. Single birds were observed at both Alaid and Nizki on 25 May (Byrd et al. 1978).

Mammals

Alopex lagopus. Arctic Fox. Following the removal of 130 foxes in 1975 (Frank and Trapp 1975), the few remaining foxes were eliminated from both islands in 1976 (U. S. Fish and Wildlife Service 1979) by means of shooting and trapping.

Orcinus orca. Killer Whale. Two killer whales were observed offshore from the large Steller's sea lion rookery at Northwest Cove on 13 May.

Enhydra lutris. Sea Otter. Kelleyhouse observed 2 females with pups in Trapp Cove on 11 July. These are the 1st recent sightings of sea otters in the Semichi Islands of which I am aware.

Eumetopias jubata. Steller's Sea Lion. We obtained accurate estimates of animals at 3 of 5 haulout areas identified in 1975. A comparison of counts in the 2 years suggests a 50% decline, from about 3150 in 1975 to 1520 in 1976: Northwest Cove population dwindled from 1500 in mid-May to 500 in mid-July (1975 estimate was 1500-1700); Leaning Rock beach population was about 350 compared with 1200-1500 in 1975; Northeast Beach (or Headland) population averaged about 170 compared with 200 in 1975. There is no way of knowing whether the apparent decline was real or was simply an artifact of the sampling method. Trapp (1975) noted that sea lions were particularly susceptible to disturbance caused by fox control activities. The total population in 1976 was estimated at about 3000-3500, somewhat lower than the estimate of 4500-5400 animals in 1975. A few pups were noted at Northwest Cove. On 19 May, Kelleyhouse and Viers managed to capture an emaciated yearling at Northwest Cove which had become entangled in trawl webbing. The webbing was cut free and the animal was released.

Phoca vitulina. Harbor Seal. Seals were common about the reefs and rocky coastlines of both islands, as they were in 1975. Gull Island, Alaid, was an important haulout and pupping area.

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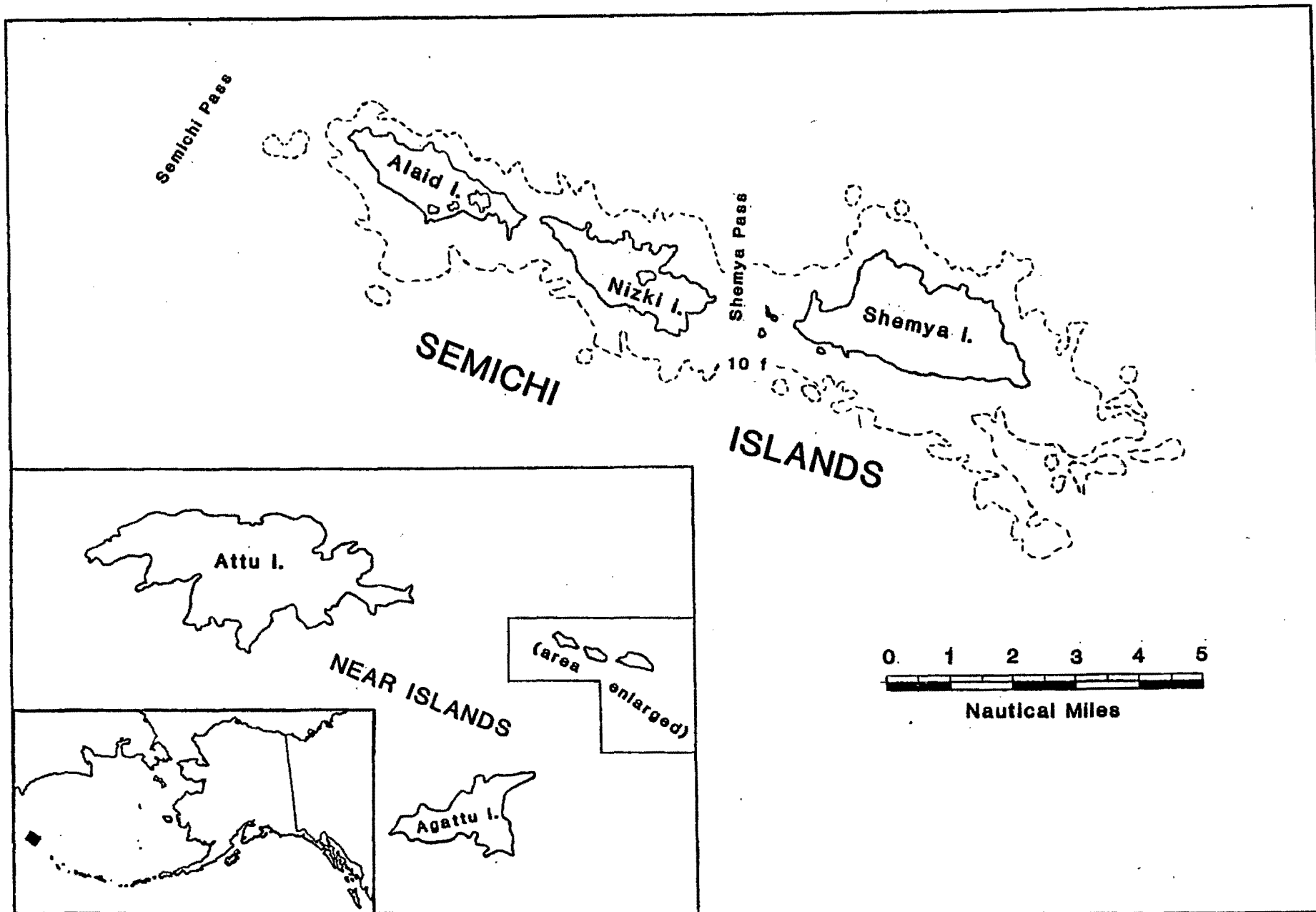


Figure 1. Location of Alaid and Nizki islands in the western Aleutian Islands, Alaska (traced from NOAA/NOS nautical chart 16421, dated 1976).

Table 1. Estimated numbers of breeding birds at Alaid and Nizki islands, 1976.

Species	Island	
	Alaid	Nizki
Red-throated Loon	2	?
Common Loon	4+	2+
Pelagic Cormorant	100	200
Red-faced Cormorant	2700	300
Green-winged Teal	6	?
Mallard	8	?
Common Eider	30	40
Peregrine Falcon	2	0
Rock Sandpiper	10	10
Parasitic Jaeger	6	6
Glaucous-winged Gull	300	150
Black-legged Kittiwake	200	0
Arctic Tern	6	50
Aleutian Tern	0	20
Pigeon Guillemot	20	0
Ancient Murrelet	?	?
Tufted Puffin	1200	200
Horned Puffin	100	100+
Common Raven	2	0
Winter Wren	?	?
Song Sparrow	?	?
Lapland Longspur	500	600
Snow Bunting	?	?
Rosy Finch	6	0

Table 2. Population indices and estimated densities of lapland longspurs at Alaid and Nizki islands, 1975 and 1976.

Transect ^a	Population Index (males within 15.24 m)		Estimated Population Density ^b (pairs/ha)	
	1975	1976	1975	1976
Alaid 1	2.5	3	1.52	1.83
Alaid 2	3	1	1.33	0.44
Alaid 3	6	3.5	4.29	2.50
Total/Average	11.5	9.5	2.17	1.79
Nizki 1	6	-	3.06	-
Nizki 2	1	-	0.56	-
Total/Average	7	-	1.87	-

^aTransect lengths in m: Alaid 1--1079, Alaid 2--1481, Alaid 3--917;
Nizki 1--1288, Nizki 2--1175.

^bAssumes equal sex ratio.

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