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BIRDS OF BULDIR ISLAND,

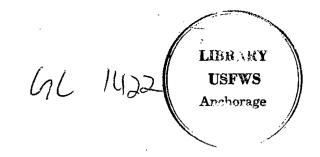
ALEUTIAN ISLANDS, ALASKA - - SUMMER 1975

Ву:

Robert H. Day and G. Vernon Byrd

ALEUTIAN ISLANDS NATIONAL WILDLIFE REFUGE

November 1975



INTRODUCTION

Buldir Island was visited by Aleutian Islands National Wildlife Refuge personnel during the summer of 1975 to conduct a breeding biology investigation of the endangered Aleutian Canada goose. This study is being conducted as part of the overall effort to reestablish this species as a breeding bird on selected islands in the western Aleutians.

Biologists remained on Buldir Island from 17 May to 5 September. In conjunction with the goose study, observations were made on other bird species occurring on Buldir as time allowed. The following people contributed observations: G. Vernon Byrd, Robert H. Day, Glenn W. Elison, Eric P. Hoberg, George Putney, Tom and Ceil Ramsey, Elaine Rhode, John Sarvis, John L. Trapp, D. H. S. Wehle, and Dennis Woolington.

A total of 77 species of birds (plus one additional race) was recorded during the summer. These species are discussed in the following annotated list.

ANNOTATED LIST

- Diomedea immutabilis, Laysan Albatross. This species was seen at sea around Buldir during the entire period, but birds were seldom encountered within two miles of land.
- Fulmarus glacialis, Northern Fulmar. Fulmars were present when we arrived on 17 May, and by 2 June birds occupied cliffs at E. Cape. On 7 June, birds were seen on nests on the south side of E. Cape, but it was not determined how many had laid eggs. About 100-200 birds appeared to be at nests south of Amphipod Hill on 23 July, but were apparently gone on 10 August. Birds were still present near Buldir when we left on 5 September.

- Oceanodroma furcata and O. Leucorhoa, Fork-tailed and Leach's Storm-Petrels.

 Petrels are abundant nesters on Buldir and were the subject of detailed study. Data are included under the results section of this report.
- Phalacrocorax pelagicas, Pelagic Cormorant. This species is uncommon at Buldir, breeding in very small, isolated loose colonies. Only two nests were observed closely: one contained two large chicks on 8 August, the other three large chicks on that day. The first of these chicks fledged 18 August.
- Phalacrocorax urile, Red-faced Cormorant. Red-faced cormorants breed in cliff rookeries with murres and kittiwakes. Each cliff segment with mixed seabirds usually had a few pairs of these. This species was more common on Outer Rock than on cliffs of the main island. No nesting chronological information was obtained.
- Branta canadensis leucopareia, (Aleutian) Canada Goose. The maine reason for being on Buldir was to studytthis endangered race on its only nesting grounds. A detailed discussion if presented in the Results section of this paper.
- Philacte canagica, Emperor Goose. The remains of a bird were found on N. 3ight Beach on 24 May, and two adults were in N. Bight on both 9 and 11 June.
- Anser fabalis, Bean Goose. A single bird was first sighted on 1 June, flying over S. Hill and Bean Goose Lake with four Aleutian Canada geese. Probably the same bird was seen flying with a single Aleutian Canada goose near Main Talus on 9 June, and alone on 20 June.
- Anas platyrhynchos, Mallard. Five birds were flushed from N. Marsh on 18 May. Thereafter one or two birds were noted regularly through 2 July. A single male at Bean Goose Lake on 24 July was the only other bird observed.
- Anas acuta, Pintail. Six birds were found in S. Marsh on 19 May. Up to ten birds were seen during the remainder of May and during June.in both marshes and on Bean Goose Lake. Fewer birds were seen in July. Males outnumbered females in May and June about 2:1, but in July females outnumbered the males. An emaciated male was found in N. Marsh on 2 July, and a dead male was found at the head of Camp Valley on 10 July. A female seen 24 July was the last observation of the season.
- Anas crecca nimia, (Aleutian) Cfreen wining dd Taall. On 19 May seven birds were present, in S. Marsh.arBatween 21 May and 13 June the largest number seen was 20 in both marshes, and sex ratios were approximately equal. One pair was seen regularly in the

- S. Marsh area 15-28 June, when they were joined by at least one more pair and two males which remained until 4 July. On 16 July a female with at least two Class IA ducklings was seen on a hillside at the southeast corner of N. Marsh, and a defensive female was encountered in S. Marsh on 22 July. From the end of July to the beginning of September, a total of five females were seen around both marshes and Bean Goose Lake. On 4 September, six birds were seen in N. Marsh.
- Anas crecca carolinensis, (North American) Green-Winged Teal. A single adult male was seen feeding in S. Marsh on 19 May and in N. Marsh on 28 and 29 May.
- Anas penelope, European Wigeon. Eight birds were present on 18 May and by 21 May the flock numbered 19. On 26 May, the flock contained 40 birds, but was down to 25 by 1 June and diminished thereafter to three birds by 15 June. Four birds seen at Bean Goose Lake 4 July were the only summer birds.
- Anas americana, American Wigeon. A high-plumaged male was observed feeding in N. Marsh on 28 May.with european wigeons. From 29-31 May two males and one female were present in N. Marsh.
- Aythya ferina, Common Pochard. A single male in high plumage remained with a pair of greater scaup in N. Bight and N. Marsh on 7-8 June. When collected in N. Marsh on 11 June, it was emaciated and unable to fly.
- Aythya marila, Greater Scaup. A single male was seen in N. Marsh on 19 May. Three males and two females were on Bean Goose Lake on 21 May, and up to three pairs were seen around N. Bight and Bean Goose Lake between 29 May and 19 June. A single male on Kittiwake Lake 16 June was the last of the season.
- Aythya fuligula, Tufted Duck. Up to two pairs were on Bean Goose Lake between 21 and 30 May. On 31 May, the carcass of a dead male was found on N. Bight Beach; another carcass was found at the Dip Camp on 27 July.
- Bucephala clangula, Common Goldeneye. Three females were seen in

 N. Bight 28 May-5 June, a male was seen near Crested Point
 4-21 June, and remains of a bird were found 25 May. The last
 sighting of the season was a single femaled noted 29 June on
 Bean Goose Lake.
- Clangula hyemalis, Oldsquaw. Nine birds were present in N. Bight from 21-30 May.

- Histrionicus histrionicus, Harlequin Duck. Birds were present on 17 May when we arrived. The maximum number of birds seen between 21 May and 23 June was 100+ in N. Bight on 29 May. During this period, flocks of more than 30 birds were seen 13 times. Female-plumaged birds far outnumbered the males, with the latter comprising less than 10 percent of birds sighted. After June a maximum of nine birds was seen around the N. Bight-Main Talus area, all female and immature birds.
- Somateria molissima, Common Eider. These birds were observed regularly off the N. Bight-Main Talus area all summer, and males were approximately twice as common as females. The two nests that were found contained four eggs each. Two eggs in one nest began hatching on 6 July and all four ducklings had departed by 10 July. Three of the four eggs in the second nest hatched 16-17 July, and the female brooded the ducklings on the way to the water on 18 July. Flocks of up to 24 males in various stages of molt were seen off the north side of Buldir from 7-30 July, and three female-plumaged birds remained around Main Talus until 18 August.
- Melanitta deglandi, White-winged Scoter. A single female was observed in N. Bight on 17 May. A male was present in the same area 5 June, and a male was commonly seen around N. Bight from 3-13 July.
- Melanitta nigra, Black Scoter. A single female was seen in N. Bight on 5 June.
- Mergus merganser, Common Merganser. Single females were present in N. Bight on 29 May and 28 July, and a male was sighted there on 19 June.
- Mergus serrator, Red-breasted Merganser. A pair was seen in N. Marsh on 19 May. From 24 May to 13 June a single female was sighted in N. Bight regularly. On 9 June, two females were seen here. A fresh carcass was found in Camp Valley on 21 May.
- Buteo lagopus, Rough-legged Hawk. One bird of the light color phase flew over N. Marsh on 19 May, and two birds were seen over Camp on 10 July, following a severe storm from the Mortheast.
- Haliaeetus leucocephalus, Bald Eagle. From 17 May through mid-June various combinations of up to four adults were seen at once over the northwest part of the island. On 4 June an active eyrie was found on a rock ridge near Amphipod Hill, and on 31 July a non-active eyrie was discovered at the upper end of Petrel Valley. Situated on a rock ledge 10-15 feet above ground level, it appeared to have had nest material added this year. One horned puffin wing was found in the nest. The active eyrie at Amphipod Hill contained a single eaglet with all flight feathers on 23 July; however, its contour areas were still down-covered. The eaglet was still in the

nest on 10 August. Adults started appearing over N. Marsh on 23 August, indicating a release from nest duties. On 28 July a dead immature bird was found above Talus Creek on Round Mountain. Food remains were collected at the Amphipod Hill nest on 23 July and 10 August, and the results are presented in Table I.

Falco peregrinus pealei, Peregrine Falcon. There was a maximum of four pairs of birds on Buldir: (1) above Main Talus, (2) a cliff face 1.75 miles southeast of E. Cape, (3) Northwest Point, and (4) the vicinity of TIP.

Only the eyrie southeast of E. Cape was acttally located, but defensive birds regularly encountered in the other areas coupled with the presence of birds of the year in at least two of the other areas strongly indicates nesting in all four locations.

Food items were not collected at nests, but birds which appeared to have been killed by peregrines were noted near the talus area; all were turned completely inside out, with everything but the skin eaten. Crested auklets seemed to be the most common prey but remains of least auklets, parakeet auklets, and ancient murrelets were also found commonly.

The first fledgling peregrine was noticed 2 August as it chased a tufted puffin. During the remainder of August, adults and immatures were regularly seen over the islands interior.

Winter mortality must occur in these resident birds. An immature bird was found dead soon after we arrived 24 May. The bird had apparently died of starvation. It was found huddled under an oil drum left from WWII. There was no evidence that it had been killed by another bird.

- Charadrius mongolus, Mongolian Plover. A single birds was noted on N. Bight Beach 19 May, and a bird in intermediate plumage fed in kelp patches on N. Bight Beach 15-18 August.
- Pluvialis dominica, American Golden Plover. Up to seven birds were seen feeding in N. Marsh during the latter half of May, a single bird was seen near Dry Lake on 8 June, and two birds were sighted on Owl Knob near Gentle Valley on 19 August.
- Arenaria interpres, Ruddy Turnstone. During spring migration birds were seen on N. Bight Beach until 11 June; maximum count was 10+ on 25 May. The next sighting was a lone bird on 12 July. Approximately three birds per sighting were counted on N. Bight Beach during the rest of July, except 25 were seen 28 July. From 1 August to 13 August, three to five birds were seen daily and from 14 August through 5 September, for an average of 11.0 birds per day used the beach (range 5-22).

PREY REMAINS FROM BALD EAGLE NEST AT EAST CAPE, BULDIR ISLAND, 1975

TABLE I

SPECIES	JULY 23 ¹	AUGUST 191	MEAN Z
Fork-tailed Storm Petrel	2 (7.4)	***	3.7
Leach's Storm Petrel	en.	2 (15.4)	7.7
Aleutian Canada Goose	-	1 (7.7) (Bamd #Y 06)	3.85
Parasitic Jaeger	1 (3.7)	••	1.85
Glaucous-wing Gull	1 (3.7)	-	1.35
Black-legged Kittiwake	-	1 (7.7) Liimaauned)	3.85
Pigeon Guillemot	-	- 1 (7.7) Limanune})	3.85
Horned Puffin	1 (3.7)	-	1.85
Tufted Puffin	3 (11.1)	1 (7.7)	9.4
Parakeet Auklet		2 (15.4)	7.7
Crested Auklet	13 (48.1)	4 (30.8)	39.4
Unidentified Small Auklet	5 (18.5)	1 (7.7)	13.1
Ancient Murrelet	$\frac{1}{27}$ (3.7)	13	1.85

 $[\]mathbf{1}_{\text{Number}}$ in parentheses are percent of total for that day.

- Calidris ruficollis, Rufous-necked Sandpiper. One bird with faded but easily recognizable plumage was on N. Bight Beach with five ruddy turnstones on 21 July. On 13 August two birds that were tentatively identified as this species were seen on N. Bight Beach, and one was collected. Two more birds were on N. Bight Beach 16-17 August and a second one was collected.
- Calidris subminuta, Long-toed Stine. Up to three birds were seen around both marshes from 21-30 May. Two birds fed around the Midden Pond from 26-28 August.
- Calidris bairdi, Baird's Sandpiper. One bird fed in a kelp patch on N. Bight Beach with five ruddy turnstones and a Mongolian plover on 15 August. It remained through 13 August.
- Calidris melanotos, Pectoral Sandpiper. A single bird fed near the Midden Pond 26-28 August.
- Calidris alpina, Dunlin. Up to three high-plumaged birds were seen in N. Marsh and near the Midden Pond 24-29 May.
- Calidits alba, Sanderling. One bird was present on 19 May on N. Bight Beach, and a single bird in winter plumage was occasionally seen there 18 August-5 September.
- Philomachus pugnax, Ruff. A winter-plumaged male regularly fed in a kelp patch on N. Bight Beach from 16 August through 5 September.
- Tringa nebularia, Greenshank. Remains of an emaciated bird were found near S. Marsh on 5 June, and two birds fed in N. Marsh on 4 September.
- Tringa glareola, Wood Sandpiper. Up to 15 birds were seen around both marshes 13 May-9 June. Two birds were on N. Bight Beach and Tattler Creek from 31 August-3 September, and three were seen in N. Marsh on 4 September.
- Heteroscelus brevipes, Polynesian Tattler. A few birds with the characteristics of this species were seen on N. Bight Beach in late May and early June, but identifications were not definite. One bird in intermediate plumage was collected on N. Bight Beach on 3 August. A single bird first seen 16 August remained through 5 September, when it was joined by two other birds.
- Heteroscelus incanus, Wandering Tattler. Birds were seen on N.

 Bight Beach to Main Talus from 22 May to 3 July. The high count was 10 on 31 May at Crested Point. From 19 July to 5 September single birds were occasionally encountered; the highsconneitherchide bardseenob SeptemberwasOundouAugusd indead baitdadoaleagnamntaing Speekes or brevipes was encountered inland along Bunting Creek.

- Tringa hypoleucos, Common Sandpiper. One bird was at the mouth of Tattler Creek on 29 May, and perhaps the same individual was at the mouth of Stint Creek on 7 June.
- Xenus cinereus, Terek Sandpiper. A single bird in breeding plumage fed in a kelp patch on N. Bight Beach from 26 August-2September.
- Limosa <u>lapponica</u>, Bar-tailed Godwit. One bird remained on N. Bight Beach near the Midden Pond 25-28 May.
- Numenius phaeopus variegatus, Whimbrel. One bird with a fairly buffy rump was seen near Main Talus on 28 May, and a second bird with a much lighter rump was observed on N. Right Beach 30 May. A single bird was seen east of Petrel Creek 31 May, and another different bird was sighted on N. Bight Beach on 11 June. One bird was sighted on the uplands near Owl Knob on 19 July, and a very light-rumped bird remained on the beach toward N. W. Point 23 Augus-3 September.
- Numerius tahitiensis, Bristle-thigh Curlew. One bird remained near the Midden Pond from 19-28 May. It was joined on 25-26 May by a second bird which called numbrouss times while flying over the Midden Pond area.
- Capella gallinago, Common Snipe. One bird was in N. Marsh on 18 May, two in S. Marsh on 19 May, and two birds seen on 25 May were the only spring records this year. Two birds were encountered in N. Marsh on 4 September.
- Phalaropus fulicarius, Red Phalarope. On 11 July, 13 birds were seen near Outer Rock. On 16 July about 50 birds were in the same area, and on 17 July the number had increased to about 200 birds.
- Stercorarius parasiticus, Parasitic Jaeger. These birds were evident over N. Marsh and Extra Plateau when we arrived on 17 May, and were seen almost daily during the summer. Although jaegers preferred habitat above the Elymus-umbel community of the lowlands, two to four birds were commonly seen over Camp Valley during the summer. Most wwweddakk-phase birds; only two light-phase birds were seen. Pairs were seen in courtship flight the last week of May and first week of June, and a nest with two eggs was found above Dry Lake on 23 June. On 4 August a bird of the year withaull its flight feathers but not yet fledged was collected. on Extra Plateau. A bird of the year seen flying over Extra Plateau on 27 August had probably fledged much earlier. A total of 87 birds was tallied during a hike around a major part of the island on 30 August. Possibly as many as 125 birds were on Buldir. Little interaction was noted between jaegers and gulls, but jaegers and peregrines were often seen chasing each other during the summer. Jaegers were still present when we left on 5 September.

- Larus hyperboreus, Glaucous Gull. One second-year bird was occasionally seen near Kittiwake Lake 1-23 June, and a first-year bird was seen near Main Talus on 20 June.
- Larus glaucescens, Glaucous-winged Gull. Many nests at lower elevations, especially along the beaches, had full clutches by 17 May. The first eggs were pipping on 14 June, and by 24 June 98.8 percent of the eggs between Main Camp and Main Talus showed evidence of hatching activity (starred, pipped or hatched). The first fledgling was seen in N. Bight on 24 July, and nearly all the birds on the beaches had fledged by 10 August. These dates are up to two weeks earlier than fledgling dates of the birds in the TIP area, on Extra Plateau, and other areas at higher elevations. Three-egg clutches were the most common, comprising 93.2 percent Wirthe nests checked; nests with one, two, or four eggs made up the remainder.

Some gulls, primarily non-breeders, fed heavily on sea lion after-births during late May and early June. Six collections of gull pellets were made during the summer. Petrels were found in 39.2 percent of the 225 pellets, fish occurred in 34.0 percent, and sea lion fur (primarily from carcasses) was in 10.8 percent (see the attached table of pellet analysis). Flies became an important part of the diet in late August and early September, but Empetrum nigrum berries were rarely eaten, probably because of a poor berry crop this fall. A number of yearling and adult crested auklets were also taken on Main Talus during this period.

Peregrines appear to be the major predators of gulls. On 25 July approximately 10 gulls near the TIP colony appeared to have been killed by peregrines. Jaegers also probably exert slight effect on gull nesting through egg predation in the higher elevation colonies.

- Lamus schistisagus, Slaty-backed Gull. On 4 June one adult flew by Main Talus.
- Larus argentatus, Herring Gull. One adult was seen with the flock of glaucous-wing gulls at the mouth of Tattler Creek on 30 May.

 It appeared to have a slightly darker mantle than the glaucous-winged gulls near it, but the eye color could not be seen.
- Larus ridibundus. Black-headed Gull. One adult was present in N. Bight 19-28 May. One immature remained near the glaucous-winged gulls in N. Bight from 28-31 May; on the latter date it was joined by a second immature.
- Rissa tridactyla and R. brevirostre, Black-legged and Red-legged Kittiwakes.

 Common breeders at Buldir, these species were studied more carefully than most others. A separate report is included in the Results section of this report.

TABLE II: GLAUCOUS-WINGED GULL PETTET ANALYSIS

	June 8 (N=69)	June 21 (N=12)	July 12 (N=48)	July 13 (N=24)	July 23 (N=54)	Sept 3 (N=18)	Mean % Occurrence
Fish	29 (42.9)*	4 (33.3)	15 (31.3)	11 (45.8)	16 (29.6)	4 (22.2)	34.0
Leach's Storm Petrel	20 (29.0)	3 (25.0)	13 (27.1)	4 (16.7)	3 (5.6)	6 (33.3)	22.8
Form-tailed Storm Petrel	. 17 (24.6	2 (16.7)	20 (41.7)	1(4.2)	2 (3.7)	ang dan	15.2
Sea Lion Fur	2 (2.9)	1 (8.3)	Mode print	4 (16.7)	14 (25.9)	2 (11.1)	10.3
Ancient Murrelet Chick	Stime Applie		100A 100F	and annual	25 (46.3)	148 484	7.7
Ancient Murrelet Adult	9 (13.0)	wa ##	water Auth	1 (4.2)	6 (11.1)	2 (11.1)	6.6
Crested Auklet	agest some			1 (4.2)	e*************************************	2 (11.1)	2.6
Grave1	4 (5.8)	1 (8.3)		/		end dep	2.4
Jnid. Small Bird		aland Bullin.	4600 4074		7844 Ann	2 (11.1)	1.8
Sea Urchin	··· ··	1 (8.3)	1 (2.1)		dispos muyo	nage was	1.7
Puffin Egg (Unidentified	1)	SHIPS SERVICE	and and	2 (8.3)	1 (1.9)		1.7
Jnid. Storm Petrel	5 (7.2)	thesis and	annia sover	adus 40-A	ands also	***	1.2
Jnidentified Egg				ette dese	3 (5.6)	page and	0.9
Jnidentified Auklet	1110	mark start	300 mm	1 (4.2)	ketis nite	ionus mans	0.7
/egetation	 Near Midden		 on-Kittiwake Lake Area	 Near Mid d en	2 (3.7) Near Midden	 Near Midden	0.6

^{*}Numbers in parenthesis are percent of occurrence for that collection

- Uria aalge and U. lomvia, Common and Thick-billed Murres. Many birds were on the cliffs when we arrived on 17 May, and many were still present when we left on 5 September. On 19 July George Putney saw an adult murre with a young near Alaid Island, and on 23 July about 50 percent of the thick-billed murre eggs below Jones Plateau were hatched. No other observations were made on murres this year.
- Cepphus columbus, Pigeon Guillemot. A few birds were present along the north shore of Buldir on 17 May, at greatest number of birds seen at once during the summer near Main Talus was 21, and they were never seen any farther offshore than 200 m. Birds were first seen carrying fish (appearing to be Ammodytes) on 4 July, and a fully fledged young was observed on 12 August at Main Talus. The dirunal activity of this species appears to be very high early in the morning, dropping to a low level during most of the day, and increasing again in the evening; the evening peak does not seem to be as high as the morning peak.
- Synthliboramphus antiquus, Ancient Murrelet. The first bird at Buldir was seen in N. Bight on the afternoon of 21 May, and on 25 May there were several thousand in N. Bight, along with a few thousand puffins. By 30 May most were probably in burrows, and there were two burrows with the first egg on 5 June. Peak laying of the first egg extended for about two weeks after that. The first downles were seen on the morning of 7 July and the peak movement was 11-14 July; it tapered off quickly after this. On 26 July a downy on N. Bight Beach was taken by a Glaucous-winged gull when it swam a few feet offshore. The last downy was seen on the morning of 9 August.
- Ptychoramphus aleutica, Cassin's Auklet. A single bird landed on the Aleutian Tern the night of 21 May; one bird was seen off Outer Rock during the daylight hours of 7 June and on 11 July a bird landed aboard the Aleutian Tern. On the night of 13 July an immature was found near the Midden site, and on 13 August a bird of the year was found in Camp, acting very listlessly. These birds breed on Buldir in probably small numbers. No breeding information or nests were discovered.
- Cyclorrhynchus psittacula, Parakeet Auklet. These birds were present at Buldir when we arrived on 17 May. Egg laying occurred during the first two weeks in June. The first eggs were found on 11 June, and a bird was brooding aewbylyhhabbildhänktk on 5 July. In general, this species was the first to leave in the morning and the last to return to the colony in the evening, although some feeding of the young appears to have takne place during the day.

- Aethia cristatella, Crested Auklet. These birds were present in large numbers, along with least auklets, when we arrived on 17 May. Eggs were first found on 12 June, although laying probably began as early as the first week in June. Several day-old downines were found in rock crevices at Main Talus on 5 July; the hatch probably continued through the last week of July. The first fledged birds were seen 3 August, and some had still not fledged by the last week of August. Nearly all adults had departed the colonies by 10 August. What appeared to be birds-of-the-year (characterized by very dark plumage and small crest) began visiting the talus during the second week in August, and were heavily preyed upon by glaucous-winged gulls.
- Aethia pusilla, Least Auklet. Least auklets were present in large numbers at Main Talus on 17 May. Eggs were laid during the end of May and the first week of June, and the probable peak of hatching was the first two weeks of July. Very few birds were seen at Main Talus in the late evening of 3 August indicating that most of the young birds had fledged. On 8 August only about 50 birds were seen during the day, and the few birds observed closely had no molt of flight feathers or general plumage changes yet. Only a few birds were noted over the colony on the evening of 12 August, but thousands were rafted in the waters off Main Talus; one bird in winter plumage, thought to be a bird of the year, was also seen at Main Talus. On 14 August only one bird was seen all day.
- Aethia pygmaea, Whiskered Auklet. Whiskered auklets were much less common than their congeners at Buldir but they were present in numbers. One chick found in beach rubble near the Main Talus weighed 30 g on 5 July and 59 g on 13 July.
- Cerorhinca monocerata, Rhinoceros Auklet. Single high-plumaged birds were identified in N. Bight J and 18 July. Aukasadaibibird (winter plumage) was seen on the rocks at Main Talus on 24 July.
- Fratercula corniculata and Lunda cirrhata, Horned and Tufted Puffins.

 A summary of the breeding biology study doma on these birds is presented in the Results section of this paper.
- Nyctea scandiaca, Snowy Owl. These birds were early only at elevations above 333 m. The maximum number seen in a day was three.

 To nests or birds of the year were found.
- Asio flammeus, Short-eared Owl. One bird was seen flying over N. Marsh on 23 May, and what may have been the same bird was encountered sitting on the east slope of Round Mountain on 7 June.

- Troghodytes troglodytes, Winter Wren. Winter wrens are abundant along the beaches at Buldir. They also occupy the talus slopes. The first fledgling was seen on N. Bitht Beach on 5 July, and fledglings became more common after that. The high count was 29 birds on N. Bight Beach on 7 August.
- Motacilla alba,, White Wagtail. Gray-backed individuals were seen near the Midden site on 18 May and 1 June, and near Crested Point 31 May.
- Motacilla flava, Yellow Wagtail. Takes birds were commonly seen on N. Bight Beach and around the Midden area 18 May-8 June, with a maximum count of 12+ on 19 May. One male established a territory near the Midden and sang there continuously until departing on 3 June.
- Erythrina erythrina, Common Rose Finch. A single female was studied carefully at the Dip Camp on 3 June.
- Leucosticte tephrocotic, Gray-crowned Rosy Finch. These birds were commonly seen around the hillsides and beaches of the island, to an elevation of 270 m. Fledglings appeared around the first week in July and family groups stayed near Camp the rest of the summer.
- Acanthis flammeus, and A. Hornemanii, Common and Hoary Redpolls. Redpolls were first seen on 23 June, near Steep Creek. Within a few days there were a number of birdsffeeding around the Midden area. Up to 30 birds, probably both species, were seen at one time, and they remained until 12 August. Three hoary-type birds were collected at the Midden on 3 July and sent to the University of Alaska Museum for identification. Other places around the island birds were seen are: (1) Steep Creek, 23 June and 8 August; (2) Glissade Valley, 25 July; and (3) below the Dip Camp, 27 July.
- Melospiza melodia, Song Sparrow. These common breeders laid most clutches during the second week of May. One nest had all the eggs hatches by 5 June, and most birds fledged by 19 June. However, some birds were still on eggs as late as 11 June. Family groups were seen around Camp until we left.
- Calcarius lapponicus, Lapland Longspur. These birds nested at various locations around the island, and were commonly seen to an elevation of 200 m. Males defended territories by 21 May, and the first fledgling was observed 7 July. However, peak fledgling did not occur until 20-24 July. The last males were heard singing on 29 July, and most were molting the first two weeks of August. Flocks appeared the third week of August, but birds were still present on 5 September.

- Plectrophenax nivalis, Snow Bunting. These birds were fairly common at elevations above 300 m, and were occasionally seen as low as 200 m. Birds nested in Icy Valley and near the Dip (Round Mountain apparently provided good nesting habitat) and birds of the year were seen in Icy Valley from 23 July on.
- Emberiza schoenicleus, Reed Bunting. An adult male in full breeding plumage was collected near Bean Goose Lake on 29 May. This is the first N. American record and specimen of this Palearctic bunting.

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