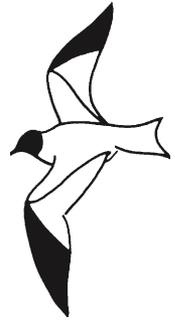


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FALL BIRD MIGRATION AT GAMBELL, ST. LAWRENCE ISLAND, ALASKA

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ABSTRACT: Gambell, St. Lawrence Island, Alaska, is located in the northern Bering Sea. Birders and ornithologists have visited Gambell, primarily during the late spring, for many decades. Regular coverage in fall, however—primarily between late August and early October—commenced only in the early 1990s and has continued through the present, making this site one of the most studied in western Alaska during the autumn season. Between 1992 and 2004, I spent a total of 251 days at Gambell between mid-August and early October, studying the birdlife. Many additional autumn avian records from there and elsewhere on St. Lawrence Island date back to the 1930s and earlier. Through 2004, 174 species had been documented at Gambell during the period August–November. Besides many species of western Alaska, this avifauna combines a seabird spectacle rivaled by few places in the world, the regular passage of many migrant shorebirds and “trans-Beringian” passerines, and numerous vagrants from both Asia and the North American mainland. The most intensive autumn coverage began only in 1999, but since then this site has hosted four first North American records—plus additional second and third sightings—as well as records of a number of North American species previously unrecorded in the Bering Sea region.

Gambell, Alaska, is a village of some 650 Siberian Yupik people located at the northwest tip of St. Lawrence Island in the northern Bering Sea (63° N, 172° W). It lies approximately 315 km west-southwest of Nome and only 65 km from the closest point on the Chukotskiy Peninsula—near the small city of Provideniya—on the Siberian mainland (Figure 1). The village of Savoonga, located 70 km east of Gambell and home to approximately 650 residents, is the only other permanent settlement on this large, mostly volcanic island, which measures just slightly over 160 km in length and 15–65 km in width, encompassing roughly 5200 km².

This article summarizes what is known about the fall bird migration at Gambell through 2004. Some 174 species have been recorded at this season. Most data are from late August to early October, between 1992 (particularly since 1999) and 2004, inclusive. Additional important information has been gathered since the late 1880s and from earlier in August and later in October

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and November. This is the only site in the Bering Sea for which there exists such a recent, extensive body of data for this season.

PHYSICAL SETTING

Located between northeastern Siberia and western Alaska, and surrounded by the biologically rich, shallow waters of the continental shelf, St. Lawrence Island was part of the Bering Strait land bridge that connected Eurasia with North America during parts of the Pleistocene, until approximately 10,000 years ago. Partly because of the proximity of both continents and of the geologically recent connection between the two, the island hosts a flora and fauna with both palearctic and nearctic—as well as holarctic—components (Fay and Cade 1959, Sealy et al. 1971). Fay and Cade (1959) noted a fourth faunal element, known as Beringian or “Aleutican,” to emphasize the distinctiveness of the avifauna of the Bering Sea region.

Three principal areas of low mountains reach elevations of just over 600 m. The only mountain near Gambell, Sevuokuk Mountain (Figures 2 and 3), lies immediately east of the village and reaches an elevation of 187 m. It and other highland areas above 60 m are characterized by lichen-covered volcanic rock and patches of low tundra vegetation. The lower slopes and lowlands are typically covered in moist tundra. Numerous ponds, lakes, and



Figure 1. Gambell, Alaska, is located at the northwestern tip of St. Lawrence Island in the northern Bering Sea. Other well-known migrant traps shown include Attu, Shemya, and Adak islands in the Aleutians, and St. Paul Island in the Pribilofs; the latter site has been surveyed extensively in fall only in 2003 and 2004. Difficult-to-reach St. Matthew Island remains only lightly explored. Many of the Asian passerines that occur as vagrants on the Bering Sea islands breed north to the Koryak Highlands or Anadyr River basin.

Map by Virginia Maynard

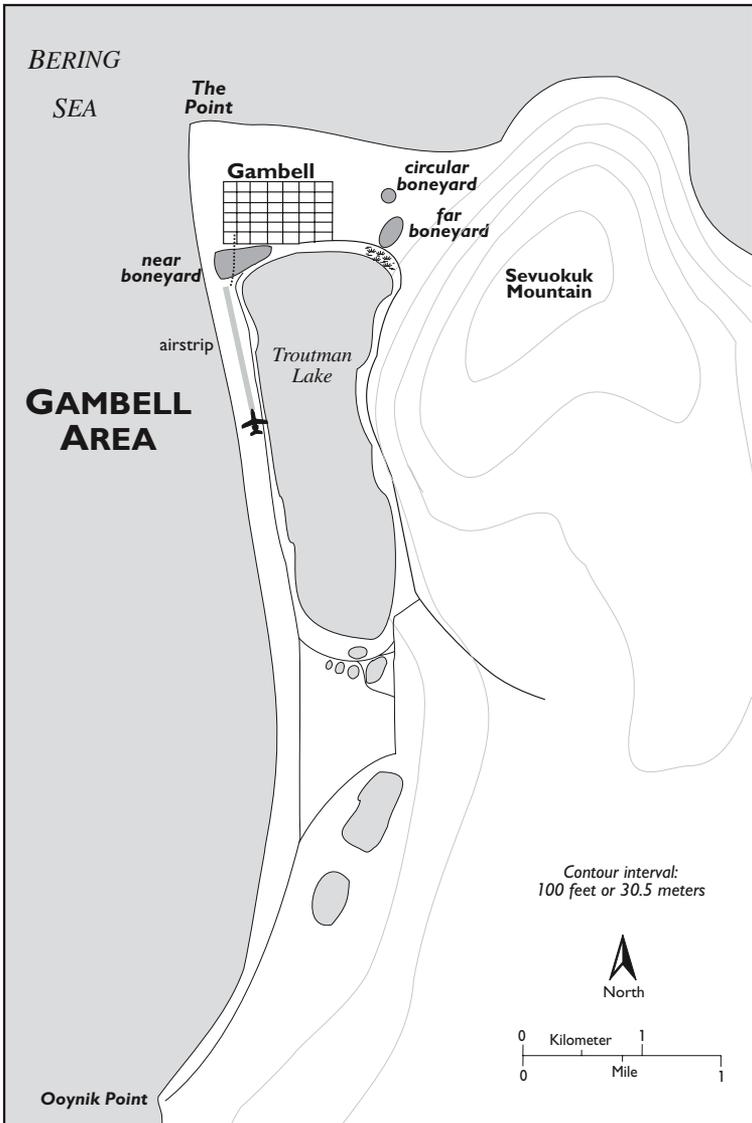


Figure 2. The Gambell area, as defined in this paper, extends approximately 8 km from the village to the first headland south of Troutman Lake. The three principal “boneyards” (middens) are excellent for landbirds. Sevuokuk Mountain (187 m) may be a partial barrier to the further eastward dispersal of some migrants, and its northern slopes host thousands of nesting alcids. Seawatching takes place primarily from “the point,” the tip of St. Lawrence Island’s Northwest Cape.

Map by Virginia Maynard

small rivers occupy approximately one-third of the surface area of the island and are productive nesting areas for waterfowl and shorebirds (Fay and Cade 1959). Several large coastal lagoons, particularly those running along the south side of the island (e.g., Koozata Lagoon), are rich environments of varying salinity that support large numbers of breeding and migrant waterbirds. Rocky sea-cliffs are home to immense numbers of nesting seabirds. Gambell village is located on a gravel bar at the island's Northwest Cape (Figures 2 and 4).

The climate at St. Lawrence Island is arctic maritime, with temperatures strongly moderated by the waters of the Bering Sea, at least when pack ice is absent. Summer temperatures rarely exceed 13° C (maximum ca. 18° C), whereas those in winter may fall to -23° C or below (minimum ca. -34° C). Moderate and strong winds blow regularly. Ocean temperatures remain between 0° and 3° C throughout the year. In late August and early September, daytime temperatures are typically 6–10° C, whereas by late September they usually remain between 1° and 4° C. Some interior sections of St. Lawrence Island, as well as stretches of protected coastline, are often warmer in the summer and colder in the winter than Gambell. The growing season stretches from approximately early June through late August (Fay and Cade 1959). Most rain falls during July and August. Mid-September often brings the first substantial snowfall to the mountains of the island and the nearby Chukotskiy Peninsula. But cycles of freezing and thawing are typical through much of November, after which snow is on the ground until spring. Total annual snowfall on the island may range from 75 to 480 cm (Fay and Cade 1959), with much blowing and drifting. Pack ice does not form until December or January. The dominant wind direction in summer is from the south and southwest, often accompanied by fog and rain, whereas that in winter is predominantly from the northeast and is stronger. Thus the autumn brings a transition period in which some years southwesterly winds dominate (at least through September), while during other years northerly or northeasterly winds last for many days in a row. This variation in wind direction is probably an important factor in determining the species composition and abundance of birds seen from year to year.

Vegetation on St. Lawrence Island is characteristic of the circumpolar tundra biome, the most homogeneous major terrestrial biotic community in the world (Fay and Cade 1959). There are few shrubs, and the only ones that might be termed “arborescent” are found in a few small, protected interior locations. Most shrubby plants are prostrate, the result of the persistent winds, thin soils, and relatively low summer temperatures. This lack of taller woody vegetation is a major distinction between the island habitats and those on the adjacent mainlands, such as the Seward Peninsula. In the area around Gambell, some of the ground is covered by very low tundra vegetation made up of forbs, grasses, sedges, mosses, and lichens, especially on the lower slopes of Sevuokuk Mountain. Much of the village itself is characterized by bare or sparsely vegetated gravel. The beaches are composed of gravel and are relatively sterile. A few small marshy areas and seasonal puddles may attract shorebirds and a few waterfowl. A large lake—Troutman Lake—is



Figure 3. This view—photographed in late August 2003—looks east and northeast from the north end of the runway and shows part of the village of Gambell and the north end of Troutman Lake. Sevuokuk Mountain is in the distance. In the foreground lies the “near boneyard.” The three boneyards act as magnets for migrant and vagrant landbirds. The rich and disturbed soil found in them supports relatively lush vegetation, dominated by the Northern or Tall Wormwood (*Artemesia tilesii*) and Arctic Sage or Wormwood (*A. arctica*), that grows to a height of over a half meter. This cover, coupled with the furtive nature of many of the migrant passerines, makes obtaining good views of some of these birds difficult.

Photo by Anne Heyerly



Figure 4. The village of Gambell is located on a gravel bar at St. Lawrence Island's Northwest Cape. In this view looking west from the lower slope of Sevuokuk Mountain, the village, point, and three “boneyards” can be seen. In the foreground, the “circular boneyard” (front right) and part of the “far boneyard” (front left) are visible, as is a section of the “near Boneyard” (rear left). Photographed on 6 September 2004.

Photo by Brian L. Sullivan

found immediately south of the village. Most of its shores are relatively sterile, and the lake itself supports only a few waterfowl, many roosting and bathing gulls, and good numbers of loafing Horned Puffins (*Fratercula corniculata*), which nest on the cliffs of adjacent Sevuokuk Mountain.

Bordering the village are three major middens (known as “the boneyards”), as well as several other areas of disturbed ground (Figures 2, 3, and 4). These areas are characterized by relatively lush vegetation dominated by Northern or Tall Wormwood (*Artemisia tilesii*) and Arctic Sage or Wormwood (*A. arctica*), which by late summer grow to a maximum height of slightly more than a half meter (Figure 3). This growth is a magnet for passerines in autumn. The list of regularly occurring avian species found here includes a number with primarily Old World distributions that also nest on mainland Alaska—a few in small numbers on St. Lawrence Island as well—but which then return west in late summer and early fall to winter in southeast Asia or Africa. These “trans-Beringian” species include the Arctic Warbler (*Phylloscopus borealis*; Figure 5), Bluethroat (*Luscinia svecica*), Northern Wheatear (*Oenanthe oenanthe*), Eastern Yellow Wagtail (*Motacilla tschutschensis*), White Wagtail (*M. alba*), and Red-throated Pipit (*Anthus cervinus*). Another trans-Beringian migrant, the Gray-cheeked Thrush (*Catharus minimus*), has nesting populations in northeastern Siberia that in fall head east, back into North America. The boneyard vegetation is also attractive to most of the vagrant landbirds from both Asia and mainland North America. Two of the three boneyards are located near the base of Sevuokuk Mountain (Figures 2, 3, and 4), which can act as a barrier to some landbirds that might otherwise continue moving farther east. Other migrants probably arrive elsewhere on the island and work their way to the northwest tip at Gambell. Many “newly arrived” passerines are not discovered in the boneyards until the afternoon.

ORNITHOLOGICAL HISTORY

The discovery of St. Lawrence Island by Europeans is credited to the Danish explorer Vitus Bering in August 1728, but the island remained little explored until the late nineteenth century. Several mostly Russian expeditions that briefly visited the island or its surrounding waters between 1779 and 1881 collected a number of avian specimens and made casual mention of some of the birds encountered (Portenko 1981). The first detailed ornithological and natural-history notes on the island were taken by Edward W. Nelson in 1881. Additional brief visits by investigators followed, including those of W. S. Brooks and J. S. Dixon in 1913 and A. M. Bailey in 1921. Friedmann (1932) was the first to summarize the bird records (through 1930). Lengthier studies were conducted by Otto W. Geist from 1926 to 1935, Henry B. Collins, Jr., from 1928 to 1930, Grenold Collins in 1937, and Robert L. Rausch and Everett L. Schiller between 1949 and 1959. Francis H. Fay carried out fieldwork for a total of 19 months between 1952 and 1957 at a variety of sites around the island. This information, combined with that accumulated by Tom J. Cade and George O. Schumann in 1950, was summarized by Fay and Cade (1959). Most of that work took place during the late spring and summer months, with little investigation during the autumn. E. G. F. Sauer and E. K. Urban studied birds along the west side of the island in 1960. Extensive

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fieldwork was carried out by Fay, Spencer G. Sealy, and Jean H. Bédard between 1958 and 1969, which was summarized by Sealy et al. (1971). Again, most of this work was carried out between the late spring and late summer, with only brief, intermittent coverage at other seasons. A detailed treatise by Leonid A. Portenko on the avifauna of the nearby Chukotskiy Peninsula in Russia, and which also mentions some records from St. Lawrence Island, was published in 1972/1973 (English translation in 1981/1989); however, most of the data from the Chukotskiy used in this study were recorded in the 1930s. The detailed work of Brina Kessel (1989) covers the avifauna of the Seward Peninsula on the adjacent Alaska mainland. It contains valuable information on the seasonal status of many waterbirds in the Bering Sea.

Several local Gambell residents stand out in their supplying a number of important bird specimens and providing valuable information to researchers visiting between the late 1920s and 1970s; they include Jimmie Otiyohok, Paul Silook, and Vernon K. Slwooko, Sr.

Birders have visited Gambell regularly during the late spring (late May through early June) since the mid-1970s. Drawn by the many western Alaska species, seabirds (Figure 6), and the regular strays from Asia, the numbers of observers at this season have increased, many visiting the village area for



Figure 5. St. Lawrence Island's location immediately south of the Bering Strait results in its collecting large numbers of "trans-Beringian" passerines that migrate in autumn from western Alaska back to Asia and even Africa for the winter. This group includes the Arctic Warbler (photographed here on 3 September 2004), Bluethroat, Northern Wheatear, Eastern Yellow Wagtail, and Red-throated Pipit. High seasonal counts of 70–74 Arctic Warblers were made at Gambell in 2002, 2003, and 2004.

Photo by Brian L. Sullivan



Figure 6. Seawatching at Gambell provides a spectacle rivaled by few places in the world. Almost a million birds (mostly murre, auklets, puffins, Pigeon Guillemots, Short-tailed Shearwaters, and Black-legged Kittiwakes) may be seen in a single day during the late summer and early fall, before the young alcids fledge and the adults move south and offshore. Good numbers of Emperor Geese, several species each of loons and eiders, Harlequin Ducks, Northern Fulmars, Pelagic Cormorants, phalaropes, jaegers, and large gulls may be seen as well. This photo, taken on 30 August 2004, shows a mixed flock of Common and Thick-billed Murres and Horned Puffins. Note the blacker coloration of the Thick-billed versus the paler (brownier) Common Murre.

Photo by Brian L. Sullivan

approximately a week as participants on scheduled birding tours. Extensive data now exist on the spring migration at Gambell, although the period from mid- to late June has been largely ignored.

Following the fieldwork summarized by Sealy et al. (1971), the next fall visit was that by Philip D. Martin for a week in early September 1975. It was almost 15 years later that more regular early-autumn exploration at Gambell commenced, when in early September 1989 M. E. "Pete" Isleib and David W. Sonneborn paid a brief visit. After this, trips of up to a week's duration were typical in the early fall, beginning with a tour I led for Wings in late August 1992. Bird photographer Don Cunningham visited Gambell between early August and early October in seven years between 1993 and 2003 and documented a number of notable records. In 1997, I again led a tour there during late August. These week-long tours have continued annually through 2004, with two tours there in 2003; none have started earlier than 20 August. In 1998, I remained at Gambell after the tour concluded, through 8 September. In 1999, I stayed a total of 45 days, until 3 October. Gary Rosenberg and others filled in for me after the tour in 2000, remaining until 15 September. I returned for extended stays in subsequent years, from 23 August through 1 October 2001, from 23 August until 2 October 2002, from 21 August to 8 October 2003, and from 14 August until 4 October 2004. As of the end of that visit, I had spent a total of 251 days in autumn at Gambell since 1992.

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Birders visiting in spring and fall since the 1970s have restricted their activities largely to within several miles of Gambell, with almost no exploration of other areas on St. Lawrence Island. The island is privately owned by Sivuqaq, Inc., and Savoonga Native Corporation. Visitors to Gambell must purchase a “land-crossing permit” upon arrival, which gives them access to areas within several miles of the village. Additional permits, special permission, and the hiring of guides are needed for forays farther away from town. For additional logistical and bird-finding information, see West (2002).

Most of the recent autumn coverage—including my own—has involved daily seawatching for two or more hours after dawn and one or more hours later in the day, multiple visits through the day to each of the boneyards and additional vegetated sites on the edge of the village, searches of the lower slopes of Sevuokuk Mountain, and periodic trips along the base of the mountain to the wetlands and first rocky headland south of Troutman Lake (almost daily early in the season, less often later in the period).

SPECIES ACCOUNTS

The accounts that follow treat the fall status and abundance of 174 species of birds recorded at Gambell, Alaska, from August to November, through 2004. “Gambell” is defined in this paper as that area which can be visited with a standard land-crossing permit: from the tip of Northwest Cape (“the point”) east to Sevuokuk Mountain and south to the first major coastal headland (Ooynik Point), approximately 8 km south of the village (Figure 2). Additional information is given for July transients and winter visitors to provide a better perspective of status. Data on the spring season (through 2004), breeding status, and records from elsewhere on St. Lawrence Island are given for many species for which that information helps illuminate fall patterns. Last, also included—in brackets—are a number of additional species for which there are no definite fall records at Gambell but have been documented or otherwise reported elsewhere on the island at this season.

The following terms designating abundance have been kept flexible so that they more accurately portray relative abundance by species:

Abundant: Always encountered in very large numbers (at least several hundred per day).

Common: Always or almost always encountered daily, usually in moderate to large numbers.

Fairly common: Usually encountered daily, generally not in large numbers.

Uncommon: Occurs in small numbers and may be missed on a substantial number of days.

Rare: Occurs (or probably occurs) annually in very small numbers.

Very rare: Averages about one record annually, but not necessarily recorded every year.

Casual: One or a few records, but thought to be a likely candidate to occur again within a few years.

Accidental: One record, and future records thought to be unlikely for many years.

Abbreviations for one oft-cited journal are as follows: *AB*, *American Birds* (through 1993); *FN*, (*National Audubon Society*) *Field Notes* (through

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1997); NAB, *North American Birds* (since 1998). Other abbreviations used: ph., photograph(s) or videotape; SLI, St. Lawrence Island; "the point," the tip of Northwest Cape, Gambell; UAM, University of Alaska Museum, Fairbanks.

The photographs and videotape noted in the accounts, as well as copies of written details for most of the rarer species, are on deposit at UAM. All records involving first Alaska occurrences have been accepted by the Alaska Checklist Committee.

BEAN GOOSE *Anser fabalis*. Accidental. One flew by the point 7 Sep 2002, one of only two definite fall records for Alaska (NAB 57:102). Both *A. f. serrirostris* and *A. f. middendorffii* have been collected in Alaska (Gibson and Kessel 1997); *serrirostris* breeds northeast to the Gulf of Anadyr and the base of the Chukotskiy Peninsula (Portenko 1981) and was collected at Gambell 8 May 1952 (Fay and Cade 1959). As a spring visitor this species is casual at Gambell but rare in the Aleutians and Pribilofs (Kessel and Gibson 1978).

[GREATER WHITE-FRONTED GOOSE *Anser albifrons*. There are no definite fall records for Gambell. One bird was seen an unknown number of miles south of the village on 8 Sep 1975, and up to 30 were at Kitnik, near Savoonga, 24–25 Aug 2004 (L. Sheffield in litt.). Local hunters report that small numbers occur irregularly in autumn in the large flocks of migrant Snow Geese that congregate on the east side of the island. This species is a rare spring migrant.]

EMPEROR GOOSE *Chen canagica*. Uncommon migrant at Gambell, but locally common elsewhere on the island. Large numbers migrate past SLI, with the primary wave typically moving immediately after the passage of a cold front and/or a wind shift to the north during late August. Under such conditions, hundreds may pass Gambell in one or two days. For example, 265 birds flew by on the morning of 26 Aug 2001, and 650 passed on 26 Aug 2003. Many flocks of hundreds of birds stay clear of the village area and arrive farther east and south on the island (e.g., 300+ on 31 Aug 2002 near Savoonga), where they linger for extended periods at scattered coastal lagoons and along rocky shores. Over 100 birds were near Savoonga already between 9 and 26 Aug 2004 (L. Sheffield in litt.). After early September only a few small flocks and single individuals were seen at Gambell, and the species was typically noted there on only a handful of days during a season. Friedmann (1932) cited a specimen collected at Gambell 2 Oct 1930. Fay (1961) noted that local residents talked of birds gathering on SLI near Southeast Cape, with some persisting until early October and a few individuals having remained even until December. Friedmann (1932) and Fay and Cade (1959) stated that Emperor Geese breed on the island but that much larger numbers of nonbreeders and molting birds are to be found along the south coast beginning in midsummer, with >10,000 having been counted there (Portenko 1981). Many of the latter birds probably perform a mid-summer molt-migration to SLI from breeding grounds at the Yukon–Kuskokwim delta (Jones 1972). Local residents have reported, however, that the increased use of all-terrain vehicles has resulted in much more human visitation to the southern and eastern sections of the island, increasing disturbance and reducing the numbers of molting geese present.

SNOW GOOSE *Chen caerulescens*. Uncommon migrant at Gambell but locally common elsewhere on SLI. These Siberian-breeding Snow Geese nest primarily on Wrangel Island and depart that area beginning in late August and early September, earlier if the weather turns cold or no young are raised (Portenko 1981). A flock of 24 arrived west of Savoonga 23 Aug 2004 (L. Sheffield in litt.). The species is numerous on SLI during September and early October, and many local residents travel to the southern and eastern parts of the island to hunt them. Thousands of birds are

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reportedly present. At Gambell, however, this species passes by sporadically (perhaps more often at night, when flocks are sometimes heard overhead), probably the result of local hunting pressure. Small- to medium-sized flocks were seen there between 26 Aug (2001) and 29 Sep (2003). Most season totals were of up to 200 birds, but 600 were counted in 2003, of which 585 passed from 26 to 29 Sep. This species is rare in spring.

BRANT *Branta bernicla*. Like the Emperor and Snow geese, this species is an uncommon migrant at Gambell, but it is locally fairly common to common elsewhere on SLI. All records refer to the Black Brant (*B. b. nigricans*). Small- to medium-sized flocks and single birds pass by the point sporadically between late August and late September (latest record: 25 birds on 30 Sep 2003). Only two birds were seen in autumn 1999, and 14 during 2004, but 120–130 were seen in both 2001 and 2002, and 186 were counted in 2003. Twelve birds flew by Savoonga 21 Aug 2004 (L. Sheffield in litt.). Portenko (1981) cited 1 Oct (1933) as the latest date for the Chukotskiy Peninsula. Fay and Cade (1959) stated that a few nest on SLI; Sealy et al. (1971) noted the Brant as “scarce” in summer, with rare concentrations of molting birds.

[**CLACKING GOOSE** *Branta hutchinsii*. Local hunters report very small numbers among the large Snow Goose flocks that congregate during fall elsewhere on the island. A few were reported taken on the island sometime between November 1995 and October 1996 (Kawerak and ADFG 1997). None have been recorded with certainty in autumn at Gambell, however, where there are a number of spring sightings (Fay and Cade 1959, Sealy et al. 1971, J. L. Dunn in litt.). The subspecies breeding along the western coast of mainland Alaska are *B. h. minima* (Yukon–Kuskokwim delta region; Gibson and Kessel 1997) and *B. h. taverneri* (from the Seward Peninsula northward), although there is a slim chance that the Lesser Canada Goose (*B. canadensis parvipipes*) from central Alaska might occur as well. Friedmann (1934) assigned bones from mid-dens on SLI to *minima*, though *taverneri* was not described until 1951.]

[**TUNDRA SWAN** *Cygnus columbianus*. There are no known fall records at Gambell, although a single immature was shot an unknown number of miles south of the village in late September or early October 2003 (ph. UAM), and a small number was reported taken on SLI sometime between November 1995 and October 1996 (Kawerak and ADFG 1997). The species is rare but regular at Gambell in spring. It nested regularly on SLI between 1899 and the 1930s (Friedmann 1932, Portenko 1981). Fay and Cade (1959) listed a number of nesting records scattered about the island through 1957, Fay (1961) noted several pairs on the western part of the island, and a number of pairs were seen during summer 2004 (L. Sheffield in litt.). All reports are assumed to involve the nominate North American subspecies, the Whistling Swan, which also breeds on the Chukotskiy Peninsula (AOU 1998). Bewick’s Swan (*C. c. bewickii*) has been seen in the latter region as well, however (Karhu 2004).]

EURASIAN WIGEON *Anas penelope*. Rare migrant. Records are primarily of single individuals and small flocks passing the point, with a few birds seen at local ponds as well. Since 1999 there have been 14 fall records involving 61 individuals, between 27 Aug (2004) and 26 Sep (2004); the largest flock was of 11 on 18 Sep 2003. This species breeds northeast to the Anadyr River basin (Vaurie 1965).

MALLARD *Anas platyrhynchos*. Casual visitor. The only definite fall record is of three individuals 14 Sep 2000 (G. Rosenberg in litt.). The species is very rare in spring. A small number of birds were reportedly harvested by residents somewhere on SLI sometime between November 1995 and October 1996 (Kawerak and ADFG 1997).

NORTHERN SHOVELER *Anas clypeata*. Casual visitor. The only fall records are of three on 25 Aug 1992 and one on 27 Aug 1998. The species is also a casual spring visitor.

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NORTHERN PINTAIL *Anas acuta*. Uncommon to fairly common migrant. Annual totals varied between 90 and 150 birds, with most seen between mid-August and mid-September. High counts were of 55 individuals on both 29 Aug 2000 and 15 Sep 2001. The latest record is for 2 Oct (2003). This species is fairly common in spring and it nests on SLI, including at Gambell in at least 1953 (Fay and Cade 1959).

GREEN-WINGED TEAL *Anas crecca*. Rare migrant. Eight birds were seen between 1 and 20 Sep 1999, a total of 14 was present between 23 Aug and 21 Sep 2002 (ph. UAM), a total of 15 was seen between 30 Aug and 12 Sep 2003, and 8 were found on 28 Aug 2004. Sometimes a small flock remained in the area for weeks. Two were near Savoonga 24–27 Aug 2004 (L. Sheffield in litt.). Because all the birds are in eclipse, female, or immature plumage, their subspecific identity is uncertain; both the American (*A. c. carolinensis*) and Eurasian (*A. c. crecca*) Green-winged Teal occur on SLI (Winker et al. 2002), as do intergrades (J. L. Dunn in litt.).

GREATER SCAUP *Aythya marila*. Casual visitor. The only fall record is of one from 16 Aug to 3 Oct 2004 (ph. UAM). A specimen was taken west of Savoonga 28 Oct 1935 (Murie 1936). This species is rare but regular in spring.

STELLER'S EIDER *Polysticta stelleri*. Uncommon migrant and visitor. Single birds and small flocks pass by the point irregularly throughout the fall. Numbers in late August typically surpass those of September. The species may occur in small numbers for several days in a row, but then a week or more may pass until the next sighting. The highest one-day total was of 54 birds, including a flock of 32, on 22 Aug 1999. Most seasonal totals ranged from 44 to 104 individuals, but only 6 birds were seen in 2004. Numbers in spring have declined recently in comparison to those in the 1980s and early 1990s (J. L. Dunn in litt.). Good numbers of eiders are known to molt in late summer along the south shore of SLI, although it is not known how many of these are Steller's. This species has been found breeding on the island on several occasions, as late as 1954 (Friedmann 1932, Fay and Cade 1959). More recently, Quakenbush et al. (2002) reported no nesting records on SLI since then and that the species was never more than a sporadic breeder. Late dates are of a specimen taken on SLI 7 Nov 1935 (Murie 1936) and three shot along the island's south shore on 6 Nov 1964 (Kessel 1989).

SPECTACLED EIDER *Somateria fischeri*. Uncommon visitor and migrant in early fall, becoming somewhat more numerous by late September; said to be common later in October and/or November. Most birds are seen from the point, but a few are found on local lakes. A small number of nests have been found on SLI (Fay and Cade 1959; USF&WS 2003, unpubl. data). Numbers are reported to linger along the south side of the island in late summer and early autumn during molt; a flock of 500–1000 molting males was reported there on 18 Sep 1980 (Kessel 1989). Typically, a few individuals are seen at Gambell on only a handful of days between late August and mid-September; sightings increase in frequency thereafter. The highest count in early autumn was of 14 on 7 Sep 2002; in mid-autumn it was of 20 individuals on 4 Oct 2003. Local residents reported that many hundreds or even thousands of birds pass Gambell and SLI during the late autumn, usually between mid-October and early November; Portenko (1981), however, cited 23 Oct (1933) as the latest date for the Chukotskiy Peninsula. A large percentage of the species' overall population has been found recently wintering in openings in the pack ice in the Bering Sea south of SLI (Petersen et al. 1999).

KING EIDER *Somateria spectabilis*. Common migrant and visitor. This is the most numerous eider at Gambell in both fall and spring, with most autumn totals ranging from 350 to 600+ and with ca. 1800 in 2003. Maximum one-day counts are 150 on 26 Sep 2001 and 190 on 24 Aug 2003. Some 200 were near Savoonga

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11 Aug 2003 and 190 were there during August 2004 (L. Sheffield in litt.). Eight specimens were taken on the island in autumn 1935 through at least 6 Nov (Murie 1936). Portenko (1981) stated that, depending on ice conditions, this species may winter in good numbers north to the Diomedes and that it winters in small numbers along the south shore of the Chukotskiy Peninsula.

COMMON EIDER *Somateria mollissima*. Uncommon migrant and visitor in early fall, becoming fairly common later in the period. Daily counts between mid-August and early September are usually of fewer than five birds, and the species is not seen at all on many days. Up to 15 were along the coast near Savoonga 7–24 Aug 2004. By mid- or late September, it is of daily occurrence at Gambell, with up to 45–60 per day, and up to 100 per day in early October. The maximum one-day count was of 170 on 29 Sep 2004. Six hundred birds were counted in 2003. This species breeds on SLI (Fay and Cade 1959), with an estimate of 350 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). Numbers are reported to spend the late summer and early autumn, during molt, along the south side of the island. Late-fall and early-winter departure dates are unknown, but specimens from SLI were taken 28 Oct and 7 Nov 1935 (Murie 1936). Kessel (1989) stated that ice conditions determine the species' departure dates from the Seward Peninsula and that it overwinters rarely as well. The subspecies occurring regularly in Alaska is *S. m. v-nigrum* (Gibson and Kessel 1997).

HARLEQUIN DUCK *Histrionicus histrionicus*. Common visitor. This species was seen daily passing the point and, especially, feeding and loafing off the rocky headlands to the south (e.g., Ooynik Point). Fay and Cade (1959) noted that SLI is a major molting site, particularly for males. Many of the birds passing Gambell are apparently making local feeding forays, so obtaining a seasonal total was virtually impossible. Most counts ranged up to 100 per day, with high counts of up to 225 per day, and 300 seen on 2 Sep 1998 (mostly at headlands south of the village). Departure dates in late fall are unknown; specimens were taken on 12 and 19 Oct 1936, and there is an anecdotal winter report of a live bird found sitting on lake ice after being wounded by a Gyrfalcon (Murie 1936).

WHITE-WINGED SCOTER *Melanitta fusca*. Rare migrant. Five or six were reported near Gambell 2–3 Aug 1946 (Fay and Cade 1959). More recently, a total of 79 individuals was counted from the point from 1998 through 2004, including a flock of 21 on 3 Oct and another of 13 on 4 Oct 2004; dates range from 26 Aug (1998 and 2003) to 4–7 Oct (2003). The subspecies involved—American *deglandi* or Asian *stejnegeri*—was not determined for most birds, although an adult male 29 Sep 2004 showed extensive, contrasting brownish flanks and lower vent, characters of *deglandi*. This species is an uncommon spring migrant. *Melanitta f. stejnegeri*—which breeds northeast to the northern Anadyr River basin (Vaurie 1965)—has been photographed in Alaska at Nome 30 May 2001 and at Gambell 2–4 Jun 2002 (Garner et al. 2004).

BLACK SCOTER *Melanitta nigra*. Rare migrant. A total of 24 individuals was counted from the point from 1997 through 2004, with dates ranging from 27 Aug (1998 and 2003) to 17 Sep (2001) and 29 Sep (2003). The species is also rare in spring. The race *M. n. americana* nests in Alaska and in eastern Russia northeast to at least the Anadyr River basin (Portenko 1981).

LONG-TAILED DUCK *Clangula hyemalis*. Uncommon migrant. This species is known to breed on SLI, with broods noted from Gambell south to Boxer Bay 8–9 Aug 1950 (Fay and Cade 1959). Also, up to hundreds of nonbreeding, molting birds summer at lakes and lagoons. This species passes the point sporadically for most of the autumn, with an increase in numbers beginning in mid-or-late September. Single-day maxima are of up to 30 birds, and season totals range from 30 to 125.

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The Long-tailed Duck is possibly more numerous elsewhere on the island (e.g., 150 on 30 Aug 1993 well south of the village). Local residents, as well as Murie (1936) and Fay and Cade (1959), also noted that large numbers overwinter locally in leads in the pack ice. The species is a common spring migrant.

RED-BREASTED MERGANSER *Mergus serrator*. Uncommon migrant. Nelson (1887) reported this species breeding on SLI in 1881, and Sealy et al. (1971) noted that it is a possible nester on the island. A specimen was collected in September 1930 (Friedmann 1932), and an unknown number of birds was seen south of Gambell 8 Sep 1975. Single individuals and small flocks passed the point between 11 Sep and 1 Oct, 2000–2004, totaling 71 individuals, and most after mid-September. The high count was of 23 on 29 Sep 2003. Late departure dates are not known; the last observations on the Seward Peninsula correspond closely with dates of freeze-up (Kessel 1989). This species is also an uncommon spring migrant at Gambell.

PTARMIGAN SP. *Lagopus* sp. Local residents have reported ptarmigan at Gambell and elsewhere on SLI casually during the late fall and winter. Murie (1936:368–369) wrote that according to O.W. Geist, “Occasionally, and practically during every winter I spent on the island, ptarmigan appeared. I believe they were blown there during heavy snowstorms, either from the Alaskan mainland, or, more likely, from the near Siberian points.... Several ptarmigan were killed by trappers last winter.” Fay and Cade (1959:111) thought that “the upland habitat where these birds were found suggests that the species may be...Rock Ptarmigan” (*L. muta*). Two Rock Ptarmigan were at Sevuokuk Mountain in April 2004 (B. Benter in litt.).

RED-THROATED LOON *Gavia stellata*. Uncommon migrant. Totals range from 4 to 17 individuals per year between late August and early October. Later records include one collected 9 Oct 1930 (Friedmann 1932), and two taken near Gambell 12 Oct 1935, and one there 24 Oct 1935 (Murie 1936). Fay and Cade (1959) reported this species as a common breeder on SLI.

ARCTIC LOON *Gavia arctica*. Rare migrant. The only fall sightings are of two on 9 Sep 1992 (D. Sonneborn in litt.), single individuals on 23 Aug 1994 (M. Heindel in litt.) and 31 Aug and 6 Sep 2003, and a total of seven birds between 16 Sep (2004) and 2 Oct (2003). Given that this species is a regular spring migrant at Gambell in small to (more rarely) moderate numbers, it is uncertain whether most fall migrants take a different route or pass by later in the season. This species nests from the Chukotskiy Peninsula south to Sakhalin Island (Dement'ev and Gladkov 1951) and in very small numbers on the Alaska mainland from the Seward Peninsula to Kotzebue Sound (Douglas and Sowl 1993).

PACIFIC LOON *Gavia pacifica*. Common migrant. Through early September daily counts were usually <10, but after that they increased to up to 75 per day, with a maximum of 125 on 30 Sep 1999. Seasonal totals ranged from 190 to 380 birds. The latest records are of specimens collected at Gambell 14 and 16 Oct 1930 (Friedmann 1932) and of two collected on SLI 29 Oct 1935 (Murie 1936). This species nests on the island (Fay and Cade 1959).

COMMON LOON *Gavia immer*. Casual visitor. The only verified records of this species on SLI involve an alternate-plumaged adult collected near Savoonga 11 Jul 1931 (MVZ 60231; Fay and Cade 1959) and one in basic plumage flying by the point 23 Sep 2004. An adult was reported at Savoonga 4 and 15 Jul 2004 (L. Sheffield in litt.). One account of some 290 birds believed to have been shot on the island between November 1995 and October 1996 (Kawerak and ADFG 1997) is certainly in error. This species is a scarce visitor to the adjacent mainland coast on the Seward Peninsula (Kessel 1989), primarily during the late summer and early fall, when it can be found daily in small numbers (pers. obs.).

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YELLOW-BILLED LOON *Gavia adamsii*. Uncommon migrant. Few occur early in the season, with <10 seen annually between mid-August and mid-September, except for 30 birds in 2004. Numbers increase thereafter. High counts were of 26 birds on 28 Sep 1999, 28 on 25 Sep 2003, and 40 on 22 Sep 2004. A total of 98 was counted between 22 Sep and 8 Oct 2003, and 132 was the season total between 25 Aug and 4 Oct 2004. Almost all birds were adults in full alternate plumage, and most were flying west to east. A specimen was collected on SLI 14 Oct 1930 (Friedmann 1932). This species is a rare migrant in spring (J. L. Dunn in litt.), and it nests sparingly on the island (Fay and Cade 1959).

HORNED GREBE *Podiceps auritus*. Casual visitor. One was present 23 Sep 2004 (ph. UAM). There are previous June records for SLI (Sealy et al. 1971). In North America this species breeds west to central Alaska (Gabrielson and Lincoln 1959) and is a very rare visitor on the Seward Peninsula (Kessel 1989); in Asia it nests northeast to the Anadyr River basin (Vaurie 1965).

RED-NECKED GREBE *Podiceps grisegena*. Rare migrant. Since 1992 there have been at least 15 fall records involving a minimum of 19 birds (ph. UAM), between 26 Aug (2004) and 3 Oct (1999). The maximum was of three on 23 Sep 2004. Some birds lingered for extended periods, so exact seasonal totals were difficult to obtain. One was collected near Savoonga 3 Oct 1953 (Bailey 1956). The species occurs annually in spring in very small numbers (J. L. Dunn in litt.), and there is one confirmed breeding record for SLI in 1940 (Sealy et al. 1971).

[SHORT-TAILED ALBATROSS *Phoebastria albatrus*. More than 100 years ago, when the species was much more numerous and widespread, Nelson (1883:111, 1887:61) reported that in late summer 1881 “adults of this species [were] seen between St. Lawrence Island and Plover Bay [Provideniya], Siberia” and that they were “common around Bering Straits in summer. A number were seen about the Diomed Islands, and others about St. Lawrence Island and the opposite Siberian shore.” The species is also known by bones from middens at Gambell and elsewhere on SLI (Friedmann 1932, Murie 1936). There is no recent record near SLI (Fay and Cade 1959). The last published reports from the northern Bering and Chukchi seas were of eight birds seen, with two collected, off the north shore of the Chukotskiy Peninsula in September 1939 (Dement'ev and Gladkov 1951); however, these specimens cannot be verified, and Alaska reports during the first half of the 20th century are complicated by the fact that all white-bodied albatrosses then were assumed to be *albatrus* (D. D. Gibson in litt.). Recent Short-tailed Albatross records have come from no closer to SLI than the central Bering Sea, e.g., west of St. Matthew Island (NAB 58:583). The breeding range of this species is restricted to islands in southern Japan.]

NORTHERN FULMAR *Fulmarus glacialis*. Uncommon to common visitor and migrant through early September, uncommon to rare thereafter. Counts varied substantially from year to year, and in late August and early September ranged from 50 per day in one year to up to 500 per day in another. Wind conditions played an important role, with the largest numbers usually counted during stronger northerly or northeasterly winds. Numbers declined rapidly beginning in September, and in some years few or no birds were seen after mid-September. The latest date at Gambell was 6 Oct (2003). This species is not known to breed on SLI, but it does nest commonly on St. Matthew Island (Winker et al. 2002) and the adjacent Chukotskiy Peninsula, where it may linger through late October (Murie 1936, Portenko 1981). Watson and Divoky (1972) noted it as common in the Bering Strait area 18 Oct 1970. It winters north to the edge of the pack ice (Kessel 1989). Almost all birds are of the light morph, with a few records of the dark morph (a rare visitor presumably from the south). Fay and Cade (1959) reported “several” in “dark plumage” from unknown season(s) near Gambell, single individuals were off the point 23 Aug 2002 and 24 Aug 2003, and two were there 15 Aug 2004.

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SHORT-TAILED SHEARWATER *Puffinus tenuirostris*. Common to abundant visitor and migrant. The waters off Gambell are important feeding grounds for this species, which breeds in southern Australia. There are very few spring records (J. L. Dunn in litt.), and local arrival dates in summer are poorly known. But spectacular numbers of birds arrive by late August. The largest numbers are seen during stronger winds, particularly those from the north or northeast, when hundreds of thousands of birds pass by and feed offshore. The species was noted daily, no matter the weather, at least in small numbers. Some sample high counts include 550,000 on 18 Sep 1999, 700,000 on 5 Sep 2000 (incorrectly noted as off Gambell's "Northeast Pt." in NAB 55:89), 550,000 on 13 Sep 2001, 600,000 on 7 Sep 2002 (ph. UAM), and 550,000 on 22 Sep 2004. In 2003, some 800,000+ were feeding close to shore from 17 to 21 Sep, peaking at an estimated 1,200,000 birds on 20 Sep (ph. UAM). Large numbers often remain in early October (e.g., 300,000 on 4 Oct 2004). In 1970 the species was still common in the Bering Strait area on 18 Oct (Watson and Divoky 1972). According to Gambell residents, Short-tailed Shearwaters may linger into November; there are records to mid-November at Barrow (Gabrielson and Lincoln 1959) and into December north to the Bering Strait.

FORK-TAILED STORM-PETREL *Oceanodroma furcata*. Casual visitor. This species is not known to nest north of the Aleutians (Sowls et al. 1978); it is casual in the northern Bering Sea between July and October. There are anecdotal records from "about St. Lawrence Island" in 1881 (Nelson 1887:64, Fay and Cade 1959). Murie (1936) cited a specimen taken at Gambell on the very late date of 2 Nov 1932 (Univ. Wash. Burke Mus. 7508). Recent records are of up to three seen off the point 6–7 Sep 2000 (NAB 55:89) and single individuals 6–7 Sep (ph. UAM) and 18 Sep 2001.

PELAGIC CORMORANT *Phalacrocorax pelagicus*. Common breeder and visitor. The nesting population on SLI was estimated at 3700 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). During my study numbers at Gambell typically ranged up to 75 per day until early September, then increased as young fledged and migrants passed by, with totals of up to 100–250 per day the rest of the month. Maxima were of 275 birds on 9 Sep 2003 and 325 on 3 Oct 2003. Counts were complicated by locally feeding birds flying in every direction. Flocks of migrants passed south offshore at moderate altitude during the latter half of September and early October. In 2004 numbers remained through the end of October (H. Irrigoo pers. comm.). Elsewhere around SLI, one was at Northeast Cape 19 Nov 1964 and several were at North Punuk Island 4 Dec 1981 (Kessel 1989). Portenko (1981) cited multiple records on the Chukotskiy Peninsula near Provideniya in November, with one very late bird 22 Dec 1937. The species winters regularly north to the Pribilof Islands, with some birds as far north as leads and polynyas [open areas] in the pack ice allow (Kessel 1989). Fay and Cade (1959) reported that local residents said that a few birds may winter along the south shore of SLI.

ROUGH-LEGGED HAWK *Buteo lagopus*. Very rare migrant and breeder. One collected at Gambell 20 Sep 1934 and another there "a few days later" provided the first island records. Murie (1936:367) ascribed them to the Asian race *B. l. kamtschatkensis*, which breeds east to the Chukotskiy Peninsula and Anadyr River basin (Portenko 1981), but Fay and Cade (1959) questioned this determination. Gibson and Kessel (1997) listed all Alaska breeding birds as *B. l. sanctijohannis*. More recent fall records at Gambell are of one 11 Sep 1975, one seen flying in off the ocean from the north 6 Sep 1998, one 15–23 Sep 1999, and apparent family groups of three birds 23 Aug–18 Sep 2002 (ph. UAM) and of up to four birds 3–14 Sep 2003. The Rough-legged Hawk is rare in spring. There are a few nesting records from elsewhere on the island (Fay and Cade 1959).

GYRFALCON *Falco rusticolus*. Uncommon to rare migrant and visitor. During my study from one to four birds were seen annually through early October, with records

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as early as 27 Aug (1993). White birds were present 11 Sep 1999, 6–12 Sep 2000, and sporadically from 9 Sep to 4 Oct 2003 and from 12 to 30 Sep 2004 (up to 2). Local residents report that this species occurs annually in October and later in the fall and winter, and there are numerous sight reports and several specimens taken on the island between late October and January, with most winter birds found along the island's south shore near polynyas (Fay and Cade 1959). Murie (1936) reported Gyrfalcons wintering around Gambell, hunting Long-tailed Ducks.

PEREGRINE FALCON *Falco peregrinus*. Rare migrant. From one to three birds were seen most years between mid-August and late September. The latest record is for 25 Sep (2002). One earlier bird was near Savoonga 1–9 Aug 2003 (L. Sheffield in litt.). The Peregrine Falcon is also a rare spring migrant.

SANDHILL CRANE *Grus canadensis*. Very rare migrant. The only recent records from Gambell proper are of two on 29 Aug 1996 (M. San Miguel in litt.), four on 30 Aug 1998, single birds on 8 Sep and 17 Sep 2001, and 12 on 18 Sep 2002. According to local residents, this species is of more regular occurrence elsewhere on SLI, where it is a fairly widespread breeder as well (Friedmann 1932, Fay and Cade 1959, Sauer and Urban 1964). A total of 74 was seen in the Savoonga area during August 2004, including flocks likely of migrants of 25 on 26 Aug and 17 on 31 Aug (L. Sheffield in litt.). The breeding population in northeast Siberia is increasing and spreading (A. Bräunlich in litt.), so the numbers of migrants on SLI may be increasing as well. Many of the birds on the Chukotskiy Peninsula depart (for the Seward Peninsula) during late August and the first week of September (Portenko 1981). The Sandhill Crane is a fairly common migrant at Gambell in spring.

BLACK-BELLIED PLOVER *Pluvialis squatarola*. Casual migrant. The only fall records are of one on 20 Aug 1967 (Sealy et al. 1971) and one juvenile on 7 Sep 1997 (D. Cunningham in litt., ph. UAM). This species is casual at Gambell in spring also and is a very rare migrant in the Bering Sea region (Kessel and Gibson 1978), though it nests very locally on the Seward Peninsula (Kessel 1989).

AMERICAN GOLDEN-PLOVER *Pluvialis dominica*. Very rare migrant. A record of up to two birds 23–25 Aug 1992 was followed by an additional seven records between 21 Aug (1999) and 8 Sep (2001), including a surprising six birds on 21 Aug 1999 (ph. UAM). Seven birds were near Savoonga during August 2004 (L. Sheffield in litt.). All fall records are of juveniles. The species is casual in spring.

PACIFIC GOLDEN-PLOVER *Pluvialis fulva*. Fairly common to common migrant. This species breeds on SLI (Fay and Cade 1959). The highest one-day count is of 95 on 3 Sep 2003. Most seasonal totals during my study ranged from 100 to 220, with 345 birds (mostly flyovers) in 2003. Adults moved south by early September, with 13 Sep (1999) the latest date for that age class. Juveniles occurred throughout the period and sometimes lingered until early October. For example, one was still present 2 Oct 1999, 16 remained on frozen marshes 29 Sep 2001 (ph. UAM), and 11 were present 1 Oct 2002 (ph. UAM), with five there the next day. Four lingering birds increased to 13 on 3 and 4 Oct 2003 (ph. UAM), with five remaining on 5 Oct.

LESSER SAND-PLOVER [MONGOLIAN PLOVER] *Charadrius mongolus*. Rare migrant. There are 11 fall records involving 18 juveniles (ph. Lehman 2000c, UAM), all since 1989, between 17 Aug (2004) and 6 Sep (1999). High counts are of four on 31 Aug 1989 and three on 2 Sep 2001. In addition, an adult was present 15–17 Aug 2004 (ph. UAM). The subspecies *C. m. stegmanni* (“mongolus group”) nests in small numbers on the Chukotskiy Peninsula (Portenko 1981) and casually in western Alaska (Kessel and Gibson 1978).

COMMON RINGED PLOVER *Charadrius hiaticula*. Very rare migrant. Single juveniles were present 20 and 25 Aug 1999 (ph. Lehman 2000c) and 16–18 Aug

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2000 (D. Cunningham in litt., Figure 7), and up to three were found 16–17 Aug 2004. This species is known to have bred elsewhere on SLI in 1960 (Sealy et al. 1971) and is thought to nest almost annually in the Gambell area, with definite nest records there in June 1997 (FN 51:1038) and June 2002 (ph. UAM). This species is a common breeder on the Chukotskiy Peninsula (Portenko 1981).

SEMIPALMATED PLOVER *Charadrius semipalmatus*. Rare migrant. One or two were seen during mid- or late August most years; five juveniles were seen 23–28 Aug 2001, and a flock of six was present 19 Aug 2004 (ph. UAM). The Semipalmated Plover is an uncommon breeder on SLI (J. L. Dunn in litt.), and nesting was recently confirmed on the Chukotskiy Peninsula (Karhu 2004).

[EURASIAN DOTTEREL *Charadrius morinellus*. Despite there being a number of records from Gambell in late spring, and the possibility that this species may nest casually on Sevuokuk Mountain (Kessel and Gibson 1978), there are no fall reports.]

WOOD SANDPIPER *Tringa glareola*. Casual visitor. A juvenile was present 28–30 Aug 1996 (FN 51:103). This species occurs more regularly in spring. It breeds north-east to the western Chukotskiy Peninsula (AOU 1998).

WANDERING TATTLER *Heteroscelus incanus*. Rare migrant. Only 12 individuals—all juveniles—have been recorded to date, none later than 28 Aug (2003). In addition, single specimens were collected elsewhere on the island 16 Jul 1955 and 8 Aug 1957 (Fay and Cade 1959). As with several other shorebirds, this species likely



Figure 7. The Common Ringed Plover is a rare but regular spring visitor and breeder at Gambell, but there are only a few fall records to date, one being of this fresh juvenile 16–18 August 2000. It differs from a juvenile Semipalmated Plover by its thinner bill (particularly the base), the lack of an obvious orbital ring, the lower border of dark feathering reaching the base of the bill at the gape, and a reduced amount of apparent toe-webbing. The difference in the call is critical to distinguishing the species in the field.

Photo by Don Cunningham

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would prove to be more numerous if the island were covered from July to mid-August. It is very rare in spring.

GRAY-TAILED TATTLER *Heteroscelus brevipes*. Rare migrant. A total of 36 juveniles (ph. *W. Birds* 31(3): rear cover; UAM) has been found in fall since 1996, between 23 Aug (2003) and 14 Sep (1999). Seasonal totals range up to eight, in both 1998 and 2003. In addition, an adult was found 25–27 Aug 1998 (ph. UAM). One bird collected on an uncertain date in July 1932 (Kessel and Gibson 1978) was almost certainly a southbound adult. This species is rare in spring. It breeds northeast to the northern Anadyr River basin (AOU 1998).

TEREK SANDPIPER *Xenus cinereus*. Casual visitor. An adult was present 25–26 Aug 1994 (FN 49:85). In addition, one was at “Booshu Camp,” ca. 29 km south of Gambell, 8 Sep 1975 (not “7 Sep”—AB 30:111). There are several spring records. The Terek Sandpiper breeds northeast to the Anadyr River basin (AOU 1998).

WHIMBREL *Numenius phaeopus*. Very rare migrant. There are three fall records of New World subspecies *N. p. hudsonicus*: up to three from 3 to 7 Sep 2000 (G. Rosenberg in litt.), one on 25 Aug 2001, and one on 1 Sep 2002 (ph. UAM). This race is numerous on the adjacent Alaska mainland (Kessel 1989). There are five fall records from Gambell of the Old World *N. p. variegatus*, which breeds as close as the Anadyr River basin (Portenko 1981). Six specimens (five at UAM, one at U.S. National Museum) have been collected on SLI, three at Gambell—11 Aug 1933, no precise date in Jul 1935, and 3 Aug 1935—two at Kukulik (near Savoonga) 2 and 5 Aug 1935, and one at Savoonga 23 Jul 1937 (Murie 1936, Gabrielson 1952, D. D. Gibson in litt.). In addition, single examples of *variegatus* were seen at Gambell 27–28 Aug 1993 (S. F. Bailey in litt.) and 15 Aug 2000 (D. Cunningham in litt., ph. UAM). Both subspecies have been recorded in spring as well.

BRISTLE-THIGHED CURLEW *Numenius tahitiensis*. Casual migrant. There were two on 25 Aug 1997 (FN 52:109), one on 28 Aug 1997 (D. Cunningham in litt., ph. UAM). In addition, a juvenile male was collected on the south side of the island 24 Aug 1957 (Fay and Cade 1959).

[BLACK-TAILED GODWIT *Limosa limosa*. Fay and Cade (1959) reported one on 5 Aug 1957 from the Boxer River valley, southwestern SLI. Kessel and Gibson (1978) did not believe that this report unequivocally eliminated the Hudsonian Godwit, *L. haemastica*.]

BAR-TAILED GODWIT *Limosa lapponica*. Very rare migrant. Single specimens of subspecies *L. l. baueri* were collected on 1 and 23 Aug 1930 (Friedmann 1932). Perhaps surprisingly, the only fall records at Gambell since then are of single, separate juveniles 24, 26, and 29 Aug 2003. Other individuals were collected at an unknown site on SLI 16 Aug 1929 (MVZ 66424, juvenile) and near Savoonga 31 Aug 1935 (Murie 1936). This species is rare in spring. It breeds in western Alaska (Kessel 1989) and is an uncommon-to-rare transient on other Bering Sea islands (e.g., Preble and McAtee 1923, Fay and Cade 1959, Winker et al. 2002).

RUDDY TURNSTONE *Arenaria interpres*. Uncommon migrant. Breeding has been documented at Gambell and elsewhere on SLI (Friedmann 1932, Fay and Cade 1959). The species is present in autumn in numbers that vary from year to year. Only five were seen in 1999 and four in 2002, but 61 were counted in 2001. Fay and Cade (1959:113) noted that “flocking began in the first week of August, and large flocks of winter-plumaged birds moving in a southeasterly direction were frequently seen near Siknik Camp [along the south shore of SLI] in the last week of that month.” The latest record is 23 Sep (2001), perhaps the latest for the northern Bering Sea region.

[BLACK TURNSTONE *Arenaria melanocephala*. One was reported near Southwest Cape, SLI, 3 Aug 1942, and two were reported at Savoonga 13 Jul 1955, with

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one of these birds collected (Fay and Cade 1959). This species is casual in spring at Gambell, on other Bering Sea islands (Winker et al. 2002), and on the Chukotskiy Peninsula (Karhu 2004).]

GREAT KNOT *Calidris tenuirostris*. Casual visitor. A juvenile was seen 22 Aug 1997, the first fall record for Alaska and only the second fall record for North America (ABA 2002). There are a number of spring records at Gambell (and from the Seward Peninsula), most from the late 1980s and early 1990s, with one in 2003 (NAB 57:390). This species is a very rare breeder in the alpine zone of the western Chukotskiy Peninsula (Portenko 1981).

RED KNOT *Calidris canutus*. Casual migrant. Single juveniles were found 26 Aug 1998 and 26–30 Aug 2000. The species is also casual in spring. All Alaska specimens involve the locally nesting *C. c. roseaari* (Gibson and Kessel 1997), although *C. c. rogersi* (presumably) breeds in small numbers on the Chukotskiy Peninsula (Karhu 2004).

SANDERLING *Calidris alba*. Rare migrant. Thirty individuals, all juveniles (ph. UAM), were seen in autumn between 1975 and 2004, with the highest count being of nine birds in 2003. The records fall between 25 Aug (2003) and 25 Sep (2003). In spring the Sanderling is casual.

WESTERN SANDPIPER *Calidris mauri*. Fairly common to common migrant through August, uncommon in early September, and rare in mid-September. Breeds commonly on SLI (Fay and Cade 1959). Numbers during early fall varied substantially from year to year. The maximum one-day counts were of 80 on both 20 Aug 1999 and 15 Aug 2004, although most daily maxima were of 10–25 birds. Two on 14 Sep (2001) were the latest. A late unidentified peep was seen in flight 22 Sep 2001. All Western Sandpipers seen from mid-August onward were juvenile.

RED-NECKED STINT *Calidris ruficollis*. Rare migrant. Records of juveniles are as follows: one on 25 Aug 1992, one on 26 Aug 1998, up to three from 23 to 28 Aug 2001 (ph. UAM, Figure 8), up to two from 24 to 26 Aug 2002 (ph. UAM), and three on 25 Aug 2003. One bird published as occurring at Gambell 14–15 Aug 1997 (FN 52:109) was actually on the Pribilof Islands. In addition, an adult was at Kongkok Bay, southwestern SLI, 28 Jul 1972 (Kessel and Gibson 1978), and a juvenile was near Savoonga 7 Aug 2003 (L. Sheffield in litt.). This species is also a rare but regular spring migrant and possible breeder on the island (Kessel and Gibson 1978, J. L. Dunn in litt.). It breeds regularly on the Chukotskiy Peninsula (Portenko 1981), where the latest record of an adult is 6 Aug (1938) and of a juvenile is 28 Aug (1933 and 1961).

TEMMINCK'S STINT *Calidris temminckii*. Casual visitor. There is one fall record, of a juvenile 28 Aug 1999. The species is very rare or casual in spring. It nests north to the Chukotskiy Peninsula (Portenko 1981).

LONG-TOED STINT *Calidris subminuta*. Casual visitor. One juvenile 21 Aug 1999 (ph. UAM) may represent the only fall record for the northern Bering Sea (NAB 54:90). There are a number of spring records at Gambell. This species breeds northeast to the southern Anadyr River basin (AOU 1998).

[**LEAST SANDPIPER** *Calidris minutilla*. L. Sheffield (in litt.) reported one at Kitnik, just east of Savoonga, 2 Aug 2004. This species is very rare at Gambell in spring. It nests in western mainland Alaska and is an uncommon-to-rare breeder from St. Matthew Island south to the eastern Aleutians (Winker et al. 2002).]

BAIRD'S SANDPIPER *Calidris bairdii*. Rare migrant. Fay and Cade (1959:115) reported that "in August flocks of two to six birds...were sometimes seen near Gambell and on the beaches of the south coast," and that "three adult males taken on the north shore of Troutman Lake, August 8, 1953, are in the UBC collection." The only

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recent sightings are of five birds between 23 Aug and 3 Sep 2003 (ph. UAM) and six between 15 Aug and 7 Sep 2004 (ph. UAM); all were juveniles. Baird's Sandpiper is a rare migrant in spring as well. Fay and Cade (1959) believed that this species possibly nested on SLI, and Sauer and Urban (1964) reported a breeding record there in June 1960. Small numbers breed on the Chukotskiy Peninsula (Karhu 2004).

PECTORAL SANDPIPER *Calidris melanotos*. Uncommon to common migrant through mid-September, uncommon to rare in late September. During my study seasonal totals ranged from 31 in 2002 to 375 in 1999 and 460 in 2003. The maximum one-day counts were of 50 on 26 Aug 2001 and 300 on 26 Aug 2003. L. Sheffield (in litt.) saw up to several hundred daily around Savoonga during August 2003, with the earliest individual on 5 Aug. Friedmann (1932) cited a SLI specimen from 13 Jul 1899 and a report of multiple birds on 29 July (year?). I saw mainly juveniles and only a few adults—in late August—although more adults probably occur in July and early August. The species' latest date (for a juvenile) was 29 Sep (2001).

SHARP-TAILED SANDPIPER *Calidris acuminata*. Uncommon to fairly common migrant. Dates range from 21 Aug (2004) to 29 Sep (2001). Seasonal totals include 36 in 1999, 40 in 2000, 55 in 2001, 74 in 2003, and 84 in 2004—but only four in 2002. Single-day maxima were of 34 on 25 Aug 2003 and 30 on 3 Sep 2004. All birds were juveniles (Figure 9). The first SLI records were of eight specimens taken elsewhere between 27 Aug and 24 Sep 1935 (Murie 1936). This species is casual in spring. It breeds west of the Chukotskiy Peninsula, where it is a fall migrant only (Portenko 1981).

ROCK SANDPIPER *Calidris ptilocnemis*. Uncommon to fairly common migrant, common as a nesting species (Fay and Cade 1959). I found small-to-moderate numbers of Rock Sandpipers, both adults and juveniles (Figure 10), through mid-September, but the species was uncommon in late September and rare in early October. The largest numbers and later records came from the rocky headlands south of the village; 40 birds were counted 8 Sep 1975. The latest record is of one at Ooynik Point 7 Oct 2003. The local subspecies is *C. p. tschuktschorum* (Gibson and Kessel 1997).

DUNLIN *Calidris alpina*. Uncommon to fairly common migrant, common as a nesting species (Fay and Cade 1959). Numbers at Gambell vary substantially from fall to fall, with 180 in 2001 but only 50 in 2002. The one-day maximum is of 50 on both 27 Aug 2000 and 24 Aug 2001, and the latest record is 26 Sep (2001). Most birds were juveniles, but a number of adults were seen as well, primarily in August. Flocks of 75–100 were noted in late August along the south shore of SLI (Fay and Cade 1959). The latest record for the Chukotskiy Peninsula is 1–3 Oct 1933 (Portenko 1981).

BUFF-BREASTED SANDPIPER *Tryngites subruficollis*. Casual visitor. There are three records of single juveniles: 23 Aug 1992, 29 Aug 2000 (ph. NAB 55:89), and 17 Aug 2004 (ph. UAM). There are also at least two spring records (J. L. Dunn in litt.). This species nests west to northern Alaska (Kessel and Gibson 1978).

[**RUFF** *Philomachus pugnax*. A juvenile was at Savoonga 25 Aug 2004 (NAB 59:130, ph. UAM). There are many spring and early-summer records at Gambell and elsewhere on SLI. This species nests regularly northeast to the Anadyr River basin (Vaurie 1965) and casually to the Chukotskiy Peninsula (Portenko 1981) and northwestern Alaska (Gibson 1977).]

LONG-BILLED DOWITCHER *Limnodromus scolopaceus*. Uncommon to fairly common migrant. Seasonal totals vary substantially from year to year, e.g., 115 in 2003 and 109 in 2004, but only 17 in 2002. The highest one-day count was of 40 on 29 Aug 2000. All birds to date have been juvenile. The latest records are 21–24 Sep (1999) and 23 Sep (2001). Small numbers have been found nesting on SLI

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(Fay and Cade 1959, Sealy et al. 1971), and the species is a regular breeder on the Chukotskiy Peninsula (Portenko 1981, Karhu 2004).

COMMON SNIPE *Gallinago gallinago*. Casual visitor. This Old World species has been recorded twice in fall: 6–13 Sep 2000 (G. Rosenberg in litt.) and 25 Sep 2001. The latter record is probably late for this latitude. In addition, an unidentified snipe was at Savoonga 25 Aug 2004 (L. Sheffield in litt.). The Common Snipe is casual in spring; it breeds northeast to the interior of the Chukotskiy Peninsula (Portenko 1981), whereas Wilson's Snipe (*G. delicata*) is found on the nearby Alaska mainland (Kessel 1989) and also has occurred at Gambell casually in spring.

RED-NECKED PHALAROPE *Phalaropus lobatus*. Uncommon breeder and migrant. The counts during late August and early September represent the tail end of the migration: only 1–15 birds were seen most years. There are no records after 7 Sep (1992). Reports of large numbers of this species from the northern Bering and southern Chukchi seas in late September (Kessel 1989) almost certainly refer to Red Phalaropes. The latest record for the Chukotskiy Peninsula is 2 Sep 1932 (Portenko 1981). The Red-necked Phalarope is known to nest on SLI (Fay and Cade 1959).

RED PHALAROPE *Phalaropus fulicarius*. Uncommon to abundant migrant. The waters off Gambell appear to be a major autumn staging area for this species during some years. As many as 10 Gray Whales (*Eschrichtius robustus*) can be seen here per day, illustrating a probable abundance of plankton, their shared food source. Large numbers of birds have been found along the east coast of the Chukotskiy Peninsula in July and August (Portenko 1981). The largest concentrations of phalaropes were noted close to shore at Gambell on days with strong winds. Small-to-moderate numbers were seen from mid- to late August, but these can build during September. Most birds in September and October were juvenile, but some molting and basic-plumaged adults remained then as well. In 1999, a total of 34,500 birds was seen, with 25,000 on 30 Sep. In 2001, 40,000 were counted during a storm on 9 Sep (ph. UAM), and 20,000 were seen 18 Sep. On 10 Sep 2003, 15,000 were counted. Hundreds of birds were still present in early October 1999 and 2001. In contrast, a mere 21 were seen through early October in 2002, and only 38 were counted between mid-August and early October 2004. Good numbers of phalaropes were present during very strong winds in mid-October 2002 and 2004, with about 100 birds remaining 30 Oct 2004 (H. Irrigoo pers. comm.). A few have remained near Provideniya up to the first few days of November, with five there 6 Nov 1937 (Portenko 1981). This species also occurs in variable, though lower, numbers in spring. Fay and Cade (1959) listed single breeding records for SLI in 1950 and 1954.

POMARINE JAEGER *Stercorarius pomarinus*. Fairly common to common migrant through mid-September, uncommon to fairly common through early October. Large numbers of birds were seen around the east end of SLI on 6 Aug 1942, "straggling along the coast singly and in groups of five or six." "During August 1956 and 1957, a continual overland flight of all three species of jaegers was observed in the Koozata Lagoon and River area, the direction of movement being from northeast to southwest for the first three weeks and northwest to southeast in the last week of the month" (Fay and Cade 1959:117). During my study small numbers were seen most days at Gambell, with occasional substantial flights of migrants past the point, establishing some of the highest counts for western Alaska: up to 500 on 25 Aug 1992 and 6 Sep 1999; the season's total in the latter year was 625. B. L. Sullivan counted 770 during the evening of 29 Aug and morning of 30 Aug 2004 (NAB 59:130). The next largest counts included a total of 285 on 6 and 7 Sep 2000 and 175 on 11 Sep 2003. No major pushes were noted in some years, when daily maxima did not exceed 20 birds. Juveniles have not been seen most years until the third week of September, but two arrived 5 Sep 2003. A flight of 35 birds on 25 Sep 2002, 90% of them adults, was unusual for the late date (NAB 57:103). Small numbers (up to 7 per day,

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including adults) were still present at my early-October departure, with high counts of 22 birds on 6 Oct and 11 on 7 Oct 2003. Two juveniles were collected somewhere on SLI 15 Oct 1928 (Fay and Cade 1959), and one was seen in the Bering Strait area 18 Oct 1970 (Watson and Divoky 1972). This species nests north of the Bering Strait; in 1953, a pair performing courtship displays was near Sevuokuk Mountain from May to August, but nesting was not confirmed (Fay and Cade 1959).

PARASITIC JAEGER *Stercorarius parasiticus*. Fairly common to common migrant through early September, uncommon in mid-September. My single-day maxima were of 22 birds on both 27 Aug 2002 and 11 Sep 2003. The highest seasonal totals were of 70 in 2002, 2003, and 2004. All age classes occurred. The only records after mid-September were of single juveniles 25 Sep 2001 and 1 Oct 2004; the latter is probably the latest date for the northern Bering Sea. Portenko (1989) reported one from the eastern tip of the Chukotskiy Peninsula 27 Sep 1933; Watson and Divoky (1972) reported one from the Chukchi Sea 30 Sep 1970. This species is not known to breed on the Bering Sea islands (Winker et al. 2002).

LONG-TAILED JAEGER *Stercorarius longicaudus*. Uncommon migrant. Seasonal totals include 18 in 1999 and 17 in 2002 but only six in 2001 and 2004 and four in 2003. The maximum one-day count was of 15 on 27 Aug 2002. An adult on 15 Sep 2001 was the latest. The latest dates for the Chukotskiy Peninsula are 17 and 18 Sep 1933 (Portenko 1989). Since 1997, almost all birds at Gambell have been adults, a few have been subadults, but none have been juvenile. Clearly, more birds would be found if observers were present earlier in the season; for example, 50–75 adults were migrating over the waters between King and St. Lawrence islands between 15 and 21 Aug 1986 (Kessel 1989). Sealy et al. (1971:331) termed this species a “known or probable breeder” on SLI.

BLACK-HEADED GULL *Larus ridibundus*. Casual visitor. An adult 26 Aug–4 Sep 2001 (ph. UAM) was the first in fall for the northern Bering Sea (NAB 56:90–91). There are over ten spring records at Gambell (J. L. Dunn in litt.). This species breeds northeast to the Kolyma River and northern Kamchatka (AOU 1998).

MEW GULL *Larus canus*. Casual visitor. There are two records of juveniles identified as *L. c. kamtschatschensis*: 25–26 Aug 1997 (ph. FN 52:141) and 24–27 Aug 2002 (ph. UAM). This race has occurred casually in spring also. It breeds northeast to the Anadyr River basin (AOU 1998). One juvenile *L. c. brachyrhynchus* was identified in fall as well, 21 Aug 1999 (ph. UAM); that subspecies breeds on the Alaska mainland (Kessel 1989).

HERRING GULL *Larus argentatus*. Common visitor. Subspecies *L. a. vegae* nests on SLI (Fay and Cade 1959), with 860 breeding birds estimated in 1996 and 1997 (USF&WS 2003, unpubl. data). In fall, during my study, it occurred at Gambell daily in moderate numbers, with some counts up to 50–60 birds per day; 75 were noted on 4 and 14 Sep 2001 and 6 Sep 2003. All age classes occurred regularly (Figure 11). Numbers declined after mid-September, with high counts in late September and early October typically around 5–15 birds per day. An apparent exodus of large gulls 3–4 Oct 2003 brought 139 heading west past Gambell, and up to nine birds were still present on 7 and 8 Oct. Portenko (1989) listed 9 Oct (1934) as the latest date for the Chukotskiy Peninsula, and Watson and Divoky (1972) saw six in the Bering Strait 18 Oct 1970. There are at least five reports of North American *L. a. smithsonianus*, very rare in the Bering Sea: a subadult 4–10 Sep 2000 (G. Rosenberg in litt., ph. UAM) and single adults 27 Sep 2001 (ph. UAM), 9 Sep 2002, 27 Aug 2003, and 24 Sep 2004. Several additional sightings of probable juveniles and subadults of *smithsonianus* at Gambell are fraught with the uncertainties associated with hybrid gulls. Some authors (e.g., Yésou 2002, Olsen and Larsson 2003) have ranked *vegae* as a full species.

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THAYER'S GULL *Larus thayeri*. Casual visitor. An adult 15 Sep 2001 provided one of few records for the Bering Sea (NAB 56:91).

SLATY-BACKED GULL *Larus schistisagus*. Uncommon visitor. Seen on about half the days in fall at Gambell, with seasonal totals varying from 9 to 17 individuals and some birds present for extended periods. The highest one-day counts were of five on 27 Aug 1993 and 25 Aug 1999. All age classes except juvenile were seen, but only several one-year-old birds were identified. The species is less regular in late September and early October than earlier in the fall. The latest date at Gambell is 5 Oct (2003). This species breeds along the Russian coast to the northeastern Koryak Highlands (Vaurie 1965); there is one definite (McCaffery et al. 1997) and a few possible (e.g., Winker et al. 2002) nesting records in Alaska.

GLAUCOUS-WINGED GULL *Larus glaucescens*. Fairly common visitor. Apparently increasing in numbers. Fay and Cade (1959:119) reported several "young of the year" in August 1957 and that "six immature specimens" were taken in earlier years. In recent years, seen daily, mid-August to early October, with most counts of 5–20 birds and a few tallies of up to 30. In 2002, unprecedented numbers for the northern Bering Sea included 74 birds heading south into southwest winds on 10 Sep; about 90% of those birds were juveniles. In 2003, up to 25–30 birds were seen daily between 26 Aug and 8 Oct, with 40 on 30 Sep; on 3 and 4 Oct an apparent exodus of large gulls brought record counts of 104 and 89 Glaucous-winged, respectively, heading west past Gambell. As in 2002, most birds in 2003 were juveniles, although all age classes were represented. Late departure dates are not known. This species has expanded its breeding range northward in the Bering Sea, and since 1966 it has nested on St. Matthew Island (Winker et al. 2002). Numbers at Gambell have recently increased substantially in spring also (J. L. Dunn in litt.).

GLAUCOUS GULL *Larus hyperboreus*. Common breeder and visitor. This species nests about sea-cliffs on the island (Fay and Cade 1959), and in 1996 and 1997 the nesting population was estimated at 650 birds (USF&WS 2003, unpubl. data). In fall at Gambell this species was present daily in numbers typically ranging between 100 and 250 individuals, occasionally up to 400. The highest counts were of 750 on 24 Aug 1999 and 600 on 15 Sep 1999. All age classes occurred. Glaucous Gulls linger into winter as long as any water remains open, including at polynyas around SLI (Kessel 1989). Small numbers remain on the Seward Peninsula and Chukotskiy Peninsula into November, with the latest records being 21 Nov and 7 Dec 1912 in the Bering Strait (Kessel 1989, Portenko 1989). Glaucous Gulls nesting on SLI are probably *L. h. pallidissimus*, although *L. h. barrovianus*, breeding on the Alaska mainland, might occur as a rare visitor.

SABINE'S GULL *Xema sabini*. Rare and somewhat irregular migrant. Most years during my study <15 were seen, and none at all were seen in 2002, 2003, and 2004. In late August 1994 the species was seen daily, with 20 birds noted 24 Aug. In 2001, a total of 48 was tallied, with several birds feeding around the point for extended periods. The latest record of an adult is 10 Sep (2001). Juveniles remained through 24 Sep 1999 and 27 Sep 2001, and another was found on 1 Oct 2001 (D. Cunningham in litt, ph. UAM). Friedmann (1932) reported that five specimens had been taken at Gambell in July and August (year?), and Fay and Cade (1959:121) noted "a few individuals and small groups near Gambell, mostly in August." This species occurs regularly during spring in small numbers.

BLACK-LEGGED KITTIWAKE *Rissa tridactyla*. Common to abundant breeder and visitor. This species breeds in large numbers on the island's sea-cliffs (Fay and Cade 1959), and in 1996 and 1997 the nesting population was estimated at 47,000 birds (USF&WS 2003, unpubl. data). For much of the fall, during my study, daily counts at Gambell ranged from 1000 to 3000, with occasional counts of up to 4000,

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and a few over 5000. About 1% to 2% of the birds were two-year-olds, with at least 5% that age during 2004. The first juveniles did not usually appear off the point until early September (earliest arrival 30 Aug 1996). The species was still very common in early October; in fact, many of the largest counts came from this part of the season, including several days with 10,000 birds, 20,000 on 3 Oct 2003, and 30,000 on 2 Oct 2004. The species was common in the Bering Strait area on 18 Oct 1970 (Watson and Divoky 1972). Late departure dates are unknown, although numbers were still present at Gambell 31 Oct 2004 (H. Irrigoo pers. comm.), and Fay and Cade (1959:121) reported "several immatures seen near Gambell" 10 Nov 1957. Portenko (1989) cited an exceptionally late record for 25 Nov 1937 near Provideniya. This species winters north to the southern Bering Sea (Kessel 1989).

ROSS'S GULL *Rhodostethia rosea*. Rare but regular late-fall and early-winter migrant and visitor. Up to four adults were foraging around the point from 28 Sep to 10 Oct 2001 (ph. UAM, Figure 12), following the passage of an arctic front. These birds were almost record-early for anywhere south of the Bering Strait. Gambell residents report that this species occurs in small numbers (up to a dozen or so) in the surf near the point some time in November and/or December of most years. Fay and Cade (1959:121) noted that, according to hunters, the species is "not seen every year" but that its "usual time of arrival [is] in late November and December when great chunks of polar pack ice drift down from the Chukchi Sea." Sealy et al. (1971) saw several near Gambell in early December 1966, and a specimen was collected in December (no more precise date) 1973 (UAM 3552; Kessel and Gibson 1978).

[IVORY GULL *Pagophila eburnea*. No fall records. Local residents reported that this species does not arrive until the pack ice forms and hunters kill seals on the nearby floes, usually during winter and spring. It has declined in recent years during late spring, when it formerly occurred somewhat regularly through late May (J. L. Dunn in litt.).]

ARCTIC TERN *Sterna paradisaea*. Uncommon migrant. Some 190 birds were estimated nesting on SLI in 1996 and 1997 (USF&WS 2003, unpubl. data). During my study numbers of fall migrants at Gambell varied substantially from year to year, from a high of 50 birds in 1994 and 25 in 2001 to none in 2002, four in 2003, and two in 2004. Some birds fed around the point area for many days. Most were juveniles, but a few adults were seen as well (two as late as 4 Sep 2000 [G. Rosenberg in litt.]). Records of juveniles after early September were of one on 11 Sep and two on 13 Sep 1999, and four on 15 Sep 2001, with three remaining to 17 Sep, two to 18 Sep, and one to 19 Sep (ph. UAM). The last are near-record-late dates for the central and northern Bering Sea. The species is rare at Gambell in spring.

DOVEKIE *Alle alle*. Very rare fall visitor. This species breeds uncommonly at Gambell (Kessel and Gibson 1978). Eleven breeding birds were counted on SLI in 1996 and 1997 (USF&WS 2003, unpubl. data), and 11 were counted on the slopes of Sevuokuk Mountain alone in late May 2003 (NAB 57:390). In fall, the species departed the nesting cliffs before observers arrived in late August, and the only fall sightings were of single birds off the point 5 Sep 1992, 28 Aug 1993, 22 Aug 1994, and 31 Aug 1998. One was 24 km south of Gambell 9 Sep 1975 (Kessel and Gibson 1978). Caution in identifying this species in autumn is warranted because of possible confusion with the juvenile Least Auklet.

COMMON MURRE *Uria aalge*. Abundant breeder and visitor through early September, uncommon to rare thereafter. Large numbers of Common Murres breed on SLI (Fay and Cade 1959), with estimates of 162,000 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). During my study up to 25,000 flew past the point daily through the end of August. A total of 75,000 birds was estimated 15 Aug 2004. Numbers declined fairly rapidly as young fledged in early September, and by

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mid-September the maximum daily counts were of fewer than 100 birds. By late September, in most years, only the occasional individual was seen. In 2003, numbers increased rapidly again in late September and peaked at up to 2500 per day from 29 Sep to 7 Oct. Almost all late-season birds were in basic plumage and headed past the point into the wind. It is possible that the species disappears from the Gambell area after nesting is completed so that birds can molt elsewhere, perhaps in more protected waters south of the island. This species winters north to the edge of the pack ice (Kessel 1989), and Fay and Cade (1959) suggested that small numbers may winter around SLI.

THICK-BILLED MURRE *Uria lomvia*. Abundant breeder and visitor through early September, uncommon to rare thereafter. Large numbers of Thick-billed Murres breed on SLI (Fay and Cade 1959), with estimates of 104,000 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). Up to 15,000 flew past the point daily through the end of August; maxima included 20,000 on 21 Aug 1999 and 25,000 on 15 Aug 2004. Numbers declined rapidly in early September as young fledged, and daily counts after 15 Sep typically did not exceed ten birds. In 2001, a late surge in numbers after 25 Sep brought up to 40 per day past the point, with 135 counted on 28 Sep; similarly, numbers increased dramatically in late September 2003, peaking at 1450 birds on 2 Oct. Almost all were seen flying into the wind, and these included birds in both alternate and basic/juvenile plumage. This species is known to winter at the southern edge of the pack ice, with a few farther north in open leads and polynyas (Kessel 1989); it is the only murre occurring regularly along the island's coast in winter (Fay and Cade 1959). There are records from the Provideniya area for 11 and 22 Dec 1937 and additional winter reports from the north shore of the Chukotskiy Peninsula (Portenko 1989).

BLACK GUILLEMOT *Cephus grylle*. Rare visitor. Through my study, one or two birds were seen most years, usually during the latter half of September. One found freshly dead in late August 1992, one 23–25 Aug 1999, two on 30 Aug 2000, and one on 27 Aug 2004 were slightly early. A total of four birds between 17 and 30 Sep 1999 was the high seasonal count. A majority of the birds were adults still in full or almost full alternate plumage. Two specimens were taken in the Gambell area 28 Nov 1929 (UAM 5369, 5370; Kessel 1989), and one was collected there 23 Nov 1930 (Friedmann 1932). This species winters in leads and polynyas in the pack ice in the northern Bering Sea (Kessel and Gibson 1978). Small numbers are seen annually at Gambell in spring through early June; most of these latter birds are subadults (J. L. Dunn in litt.). Bédard (1966) considered this species a probable nester on SLI, although no breeders have been found on the island since then (USF&WS 2003, unpubl. data).

PIGEON GUILLEMOT *Cephus columba*. Common breeder and visitor. This species nests on SLI (Fay and Cade 1959), with estimates of 5100 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). Autumn counts at Gambell typically ranged from 50 to 200 per day. This species molts into basic plumage earlier than does the Black Guillemot, although one individual in full alternate plumage was seen 28 Sep 2001. Substantial numbers occur during the latter half of September and early October, flying into the wind on days with strong northerly winds. Such counts included 325 individuals on 27 Sep 2001, 225 on 28 Sep 2001, and 195 on 26 Sep 2003. Pigeon Guillemots were still numerous in early October (e.g., 51 on 6 Oct and 28 in one hour 8 Oct 2003). Friedmann (1932) reported a specimen collected at Gambell 11 Oct 1930, the latest record for the northern Bering Sea (Kessel 1989). This species winters south of the pack ice (Kessel 1989). A substantial percentage of the Pigeon Guillemots at SLI in fall have at least one-third of their underwing whitish, causing some of them to be misidentified as Black Guillemots.

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MARbled MURRELET *Brachyramphus marmoratus*. Casual visitor. One was at the point 5 and 7 Oct 2003. This species was reported elsewhere on SLI 29 Jul 1964 (three birds, one collected; Bédard 1966) and 1 Aug 1986 (three birds off the east end of the island; Kessel 1989). There are also several recent spring records at Gambell. Marbled Murrelets are not known to nest north of the Aleutian Islands and Alaska Peninsula (Kessel and Gibson 1978).

KITTLITZ'S MURRELET *Brachyramphus brevirostris*. Very rare visitor. Recent fall records are for 28 Aug 1992, 3 and 14 Sep 1999, 26 Sep 2002, and 5 Sep (two) and 2 Oct 2003. Fay and Cade (1959:123) reported that "in 1950 about fifty birds in small flights were seen passing Chibukak Point [i.e., the point of Northwest Cape] between August 10 and 15." This count is exceptional if correct. Two Kittlitz's Murrelets were east of Savoonga 17 Aug 2004 (L. Sheffield in litt.). This species also is very rare in spring. It breeds very locally along the coasts of the Bering and Chukchi seas (Kessel 1989). Fay and Cade (1959) reported it as a probable breeder on SLI. On the Chukotskiy Peninsula it is a rare breeder, with most sightings in August (Portenko 1989).

ANCIENT MURRELET *Synthliboramphus antiquus*. Rare visitor. Since 1994 there have been at least nine fall records involving 23 individuals of this visitor from the south, between 22 Aug (1994) and 1 Oct (2004; ph. UAM). A surprising seven birds were tallied 21 Sep 2001. Between 1946 and 1966, during late July and early August, there were three additional records from elsewhere around the island (Sealy et al. 1971). This species is also rare in spring and early summer. It breeds north to the Aleutians (Sowls et al. 1978) and probably bred at the Pribilofs in 2004 (G. Bieber pers. comm.). Many birds disperse north into the southern Bering Sea, especially during August and September (Kessel 1989).

PARAKEET AUKLET *Aethia psittacula*. Common to abundant breeder and visitor through late August, uncommon to rare thereafter. This species nests on SLI (Fay and Cade 1959), with estimates of 4000 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). From mid-August to the beginning of September counts typically ranged from several hundred to 1000 per day, with 2000 per day noted in late August 1996. The occasional juvenile making its first flight to the sea was found crash-landed around the village. Numbers dropped off rapidly after that as young fledged and birds moved south or locally offshore. The species was rare during the latter half of September and early October, when on most days none were seen. High counts late in the season included a total of 35 from 24 to 28 Sep 2003 and 15 on 5 Oct 2003. The latest date for Gambell is 8 Oct (2003). Watson and Divoky (1972) saw one Parakeet Auklet in the Bering Strait area 18 Oct 1970. This species winters north to the Pribilof Islands (Kessel 1989).

LEAST AUKLET *Aethia pusilla*. Abundant breeder and visitor. Huge numbers nest on SLI (Fay and Cade 1959), with an estimate of 1,800,000 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). Fall counts from the point ranged up to 60,000 per day in mid-August and up to 20,000 per day in late August, although in 2002 most birds apparently finished nesting earlier than usual and the maximum count per day was only 70. Each year a few juveniles making their first flight to the sea were found crash-landed around the village. Numbers dropped off rapidly by early September, and overall counts into mid-September usually did not exceed 100–200 per day. On most days during the latter half of the month none were seen. Although most Least Auklets probably headed south for the winter during the first half of September, moderate numbers may have remained offshore later into the season, as they were seen off the point on some days, most often flying into the wind during onshore winds (e.g., 1000 on 21 Sep 2001, 2500 on 16 Sep 2003, and 300 on 5 Oct 2003). The latest record at Gambell is 7 Oct (2003; 15 birds). One was at Nome 17 Oct 1913 (Kessel 1989). Storm-deposited birds were at Nome and Kotzebue 18–19 Oct 2004 (NAB 59:130). This species is known to winter north to the Pribilof Islands (Kessel 1989).

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CRESTED AUKLET *Aethia cristatella*. Abundant breeder and visitor. Huge numbers nest on SLI (Fay and Cade 1959), with an estimate of 1,500,000 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). Counts from the point between mid-August and the beginning of September were often in the range of 100,000–400,000 per day, with up to 600,000 per day estimated in late August 1999 and up to 800,000 per day in mid-August 2004. The largest numbers of birds pass by during the late afternoon and evening hours; early-morning flights on 1 Sep 2001 and 15 Aug 2004 brought 100,000 and 150,000 birds, respectively, in just one hour. Numbers dropped off rapidly in early September as young fledged; a few juveniles were found crash-landed around the village annually. Beginning mid-September, as birds migrated south or moved locally offshore, totals often were less than 50 per day and the species was missed many days; by late in the month it was often absent. Occasional late flights brought brief surges in numbers, such as 1050 on 27 Sep 1999, 780 on 25 Sep 2003, and 275 on 5 Oct 2003. Recorded through 8 Oct (2003). One was in Norton Sound 13 Oct 1879 (Nelson 1887). Birds were found at sea near Provideniya throughout November 1937, with the latest on 30 Nov (Portenko 1989). Crested Auklets winter north to the Pribilof Islands (Kessel 1989).

HORNED PUFFIN *Fratercula corniculata*. Abundant breeder and visitor through early September; common to uncommon thereafter. Large numbers nest on SLI (Fay and Cade 1959), with estimates of 5000 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). This estimate appears to have been low, and the breeding population on Sevuokuk Mountain increased visibly over the past decade. The two puffin species are the last alcids to fledge young, so the numbers of birds typically did not begin to decline until later in September. Counts often reached 2500 per day, with up to 5500 per day estimated in 1999 and 5000 seen 7 Sep 2001. In late September, daily maxima were often of 10–50 birds. In 2002, 2003, and 2004, many alcids appeared to fledge early, and few Horned Puffins were seen after mid-September. During most years, only a few immatures and birds in nonbreeding plumage were seen from the point. Recorded through 3 Oct (1999; 30 birds) and 4 Oct (2003; three birds). One was in the Bering Strait area 18 Oct 1970 (Watson and Divoky 1972), and two were in Kotzebue Sound 28 Oct 1984 (Kessel 1989). This species winters north to the Pribilof Islands (Kessel 1989).

TUFTED PUFFIN *Fratercula cirrhata*. Abundant breeder and visitor through early September, common to uncommon thereafter. Large numbers nest on the island (Fay and Cade 1959), with estimates of 8200 birds in 1996 and 1997 (USF&WS 2003, unpubl. data). Numbers stayed fairly constant from mid-August until early or mid-September. Most daily maxima were in the 200–1000 range, with 3000 on 10 Sep 2001 and 15 Aug 2004. From mid- to late September, daily counts typically ranged between 10 and 50 birds but went down to zero as well, particularly if the nesting season was early, as it was in 2002, 2003, and 2004. During most years, only a few immatures and birds in nonbreeding plumage were seen from the point, although 20 such individuals were counted 25 Aug 2004. Recorded through 4 Oct (2003; four birds). In 1931 this species lingered near Provideniya “until the bay froze” (Portenko 1989). Most Tufted Puffins from the Bering Sea winter in the North Pacific, with small numbers as far north as the southern Bering Sea (Kessel 1989).

[ROCK PIGEON *Columba livia*. A domestic pigeon wearing a leg band (i.e., a homing pigeon) was reported by Gambell residents sometime during autumn 1964 (Sealy et al. 1971).]

ORIENTAL CUCKOO *Cuculus saturatus*. Casual visitor. Two fall records: 23 Aug 1999 (ph. Lehman 2000b,c, UAM; Figure 13) and 15 Sep 2002 (ph. UAM; hepatic morph). There are also two July specimens from Gambell, both examples of subspecies *C. s. horsfieldi*: 1 Jul 1930 (originally identified as a Common Cuckoo, *C. canorus bakeri*; Friedmann 1932) and 14 or 15 Jul 1935 (ABA 2002). Interestingly,

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all late-spring cuckoos at Gambell identified to species have been Common Cuckoos (*C. canorus*), whereas the four from mid-summer and fall have been Oriental. This species breeds northeast to the Anadyr River basin (AOU 1998).

SNOWY OWL *Bubo scandiacus*. Uncommon visitor. Nests on SLI away from Gambell (Fay and Cade 1959). "From October to May these birds are rare inland and on the north coast, but they are common on the west and south coasts where they prey almost exclusively on waterfowl...Throughout this period they range far out on the sea ice wherever there is open water" (Fay and Cade 1959:126). Local residents stated that this species occurs around Gambell many years during the late fall and winter. Most birds arrive beginning in October; earlier records include one bird collected 18 Sep 1930 (Friedmann 1932), one from 23 to 26 Aug 1994, and one on 20 Sep 2003. The Snowy Owl is casual at Gambell in late spring.

SHORT-EARED OWL *Asio flammeus*. Very rare visitor. Murie (1936:374) noted that a specimen "was obtained from an Eskimo boy at Gambell on 23 Nov 1934"; this is an exceptionally late date. The recent records are 4–9 Sep 1992 (D. Sonneborn in litt.), 29 Aug 1996 (M. San Miguel in litt.), 1 Oct 1999, and 15 Sep 2002. This species occurs almost annually in spring (J. L. Dunn in litt.). Sealy et al. (1971) mentioned very rare breeding records for the island, including several nests at Gambell in 1959 and 1960.

BOREAL OWL *Aegolius funereus*. Casual visitor. There are three specimens of the North American subspecies *A. f. richardsoni* from SLI, one of which was collected at Gambell 10 Nov 1955; the other two are from March, one at Gambell and one at Savoonga (Fay and Cade 1959).

NORTHERN SAW-WHET OWL *Aegolius acadicus*. Accidental. One individual of the nominate race was found 16 Oct 1972 (UAM 2689; Kessel and Gibson 1978). This species is not known to nest north of south-coastal or perhaps central Alaska (Kessel and Gibson 1978).

FORK-TAILED SWIFT *Apus pacificus*. Accidental. One was photographed 15 Sep 1993 (ABA 2002, ph. UAM). This is the sole record for the northern Bering Sea. The species breeds northeast to the Koryak Highlands (Dement'ev and Gladkov 1951, Vaurie 1965).

[**HUMMINGBIRD SP.** Casual visitor. There are three unconfirmed reports by local residents of unidentified hummingbirds seen elsewhere on SLI: two undated, obscure reports (Fay and Cade 1959) and one of a probable Rufous Hummingbird (*Selasphorus rufus*) in September 1960 (Sealy et al. 1971). That species breeds north to south-coastal Alaska (Kessel and Gibson 1978).]

EURASIAN WRYNECK *Jynx torquilla*. Accidental. One was present 2–5 Sep 2003 (ph. NAB 58:175, UAM; cover photo). There is just one prior Alaska record, a specimen of *J. t. chinensis* (8 Sep 1945 at Wales; Bailey 1947). This species breeds no closer than the shores of the northwestern Sea of Okhotsk (ABA 2002), possibly to the western Koryak Highlands (www.neisri.magadan.ru/academnet/infocentr/f_f/fauna/ptici/ptici.html).

OLIVE-SIDED FLYCATCHER *Contopus cooperi*. Accidental. One was collected 31 Aug 1989 (UAM 5659; AB 44:143); the only other Bering Sea records are of single birds at Gambell and St. Paul in late spring (J. L. Dunn in litt.). This species nests west only to central Alaska (Gabrielson and Lincoln 1959).

LEAST FLYCATCHER *Empidonax minimus*. Accidental. One on 19 Sep 2001 provided the first record for the Bering Sea (NAB 56:91). This species is a rare visitor and possible breeder in southeastern and east-central Alaska (Gibson and Kessel 1992, Kessel and Gibson 1994).

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WESTERN FLYCATCHER *Empidonax difficilis/occidentalis*. Casual visitor. Single Pacific-slope/Cordilleran Flycatchers were found on 26 Aug 1992 (ph. UAM) and 1–2 Sep 2001 (ph. NAB 56:128, UAM). These records are the only two for the Bering Sea region; *E. difficilis* breeds north to southeastern Alaska (Gabrielson and Lincoln 1959).

NORTHERN SHRIKE *Lanius excubitor*. Casual visitor. The only fall record was on 27 Sep 1999. The species breeds on the adjacent Alaska mainland (Kessel 1989); Portenko (1989) cited only one record for the Chukotskiy Peninsula.

WARBLING VIREO *Vireo gilvus*. Casual visitor. Single individuals were present 22 Sep 2002 (ph. UAM), 7 Sep 2004, and 4 Oct 2004. The only other records for the Bering Sea region are of one photographed at Wales 4 Oct 1995 (D. Cunningham in litt.) and one at St. Paul Island 15 Sep 2004 (NAB 59:130). This species breeds north to southeastern Alaska (Kessel and Gibson 1978).

COMMON RAVEN *Corvus corax*. Fairly common to common permanent resident. Counts in August averaged 3–12 per day. Numbers increased during September as birds probably breeding elsewhere on the island congregated around Gambell for the late fall and winter, when the best foraging is found there (e.g., garbage dump, marine mammal carcasses). In late September and early October daily maxima were 10–17, with high counts of 27 on 28 Sep 2002 and 24 on 22 Sep 2003. On several occasions small groups were seen heading northwest from the point toward Siberia, only to turn around after up to a mile at sea. But five birds on 2 Oct 2003 sustained such a heading, at moderate altitude, until they were out of sight, as did eight on 30 Sep 2004.

SKY LARK *Alauda arvensis*. Casual visitor. There are two fall records: 24 Sep 2001 and 28 Sep 2002 (ph. UAM). This species is also casual in spring. It breeds northeast to the Koryak Highlands (Dement'ev and Gladkov 1954, Vaurie 1959).

HORNED LARK *Eremophila alpestris*. Very rare visitor. Northern Palearctic *E. a. flava*, a yellow-faced race that breeds east locally to the central Chukotskiy Peninsula (Portenko 1989), was first recorded at Gambell on 25 Aug 1967 when two were collected from a flock of six (Univ. British Columbia 13356, 13357; Sealy 1968, Sealy et al. 1971). Additional sightings are of one 4–10 Sep 1999, one on 1 Sep 2002 (ph. UAM), a flock of four on 13 Sep 2002 (ph. UAM), and one on 12 Sep 2003. In addition, a Horned Lark not identified to subspecies was seen 24 Aug 1994 (M. Heindel in litt.). There are spring specimens of *E. a. arctica*, which breeds on the Alaska mainland (Sealy et al. 1971), as well as additional spring sightings of similar white-faced birds.

TREE SWALLOW *Tachycineta bicolor*. Casual visitor. In addition to several late spring and summer records, one was reported on SLI 5 Aug 1960 (Sauer and Urban 1964), a mummified bird was found at Gambell 2 Aug 1968 (Sealy et al. 1971), and up to three individuals were there 18–19 Aug 2004 (ph. UAM). One was near Savoonga during mid-Aug 2004 (L. Sheffield in litt.). This species breeds on the western Alaska mainland (Kessel 1989).

BANK SWALLOW *Riparia riparia*. Casual visitor. One was killed by a boy 11 Aug 1950 (Fay and Cade 1959) and one was seen 22 Aug 1992. A total of 12 birds was found 15–19 Aug 2004 (ph. UAM), including 10 together 16 Aug. Also, two were near Savoonga 19 Aug 2004 (L. Sheffield in litt.). This species occurs almost annually in spring. It breeds on the western Alaska mainland (Kessel 1989).

BARN SWALLOW *Hirundo rustica*. Casual visitor. One white-bellied bird, believed to be Asian *H. r. gutturalis* or *rustica*, which breeds as close as the lower Anadyr River basin (Portenko 1989), was seen 28 Aug 1993 (S. F. Bailey in litt.). Both *gut-*



Figure 8. Juvenile Red-necked Stints have proven to be rare but regular August migrants in the Bering Sea region. This bird was one of three Red-necked Stints at Gambell between 23 and 28 August 2001. Note the pattern of the duller wing coverts and tertials versus the brighter mantle and scapulars.

Photo by Julian R. Hough

turalis and North American *H. r. erythrogaster* have been recorded at Gambell and elsewhere on SLI in late spring and summer (Kessel and Gibson 1978, J. L. Dunn in litt.). A specimen of *erythrogaster* reported to have been found near Gambell 14 Aug 1950 (Fay and Cade 1959) is almost certainly the same bird (UAM 254) salvaged 24 June 1950, according to the specimen label (D. D. Gibson in litt.). That race is very rare anywhere north or west of south-coastal Alaska (Kessel and Gibson 1994).

RED-BREASTED NUTHATCH *Sitta canadensis*. Casual visitor. A juvenile male was collected 28 Sep 1969 (USNM 532682; Sealy et al. 1971), in an irruption year for the species. One was seen 23 Sep 1999; in addition, a local resident reported one about 5 miles from Gambell a few days earlier. In 2004, an irruption year outside Alaska, two birds on 6 Sep (ph. UAM) increased to eight on 7 Sep (ph. UAM), with five still present 9 Sep and one remaining 11 Sep; additional single individuals were seen 13 Sep (ph. UAM) and 15 Sep (ph. UAM). This species breeds north regularly only to south-central Alaska (Kessel and Gibson 1978).

RUBY-CROWNED KINGLET *Regulus calendula*. Rare visitor. Single birds were found 24 Sep (ph. UAM) and 2–3 Oct 1999, three were present 22 Sep 2002 (ph. UAM), one was seen 23 Sep 2003, a total of seven was found between 7 and 19 Sep 2004 (ph. UAM), and single birds were seen 30 Sep (ph. UAM) and 2–3 Oct 2004. This species breeds on the western Alaska mainland (Kessel 1989).

MIDDENDORFF'S GRASSHOPPER-WARBLER *Locustella ochotensis*. Casual visitor. Single individuals were photographed 30 Aug 1996 (ph. FN 51:104; Figure 14), 5 Sep 2003 (ph. NAB 58:175, UAM), and 7 Sep 2004 (ph. NAB, UAM). In addition, an unidentified grasshopper-warbler, probably Middendorff's, was present 25–26 Aug 1994 (FN 49:86). This species breeds only as close as southern Kam-



Figure 9. The Sharp-tailed Sandpiper is another Asian shorebird that is a regular fall migrant through the Bering Sea region, sometimes in moderate numbers (e.g., total of 84 at Gambell in 2004), almost all juveniles. It is casual anywhere in Alaska in spring. This juvenile was photographed at Gambell in late August 1998.

Photo by Paul E. Lehman



Figure 10. One of the highlights of the autumn season at Gambell and elsewhere in western Alaska is the opportunity to study birds in juvenal and fresh fall plumages not seen by many North American birders. This Rock Sandpiper (*C. p. tschuktschorum*), which retains much juvenal plumage, was photographed on 26 August 2004.

Photo by Brian L. Sullivan

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Figure 11. Several species of large gulls occur at Gambell during the late summer and early autumn. The most abundant is the Glaucous, followed in decreasing numbers by the Herring (subspecies *vegae*), Glaucous-winged, and Slaty-backed. There are also several records of wandering Herring Gulls from the North American mainland (subspecies *smithsonianus*) and one of Thayer's Gull. This mix poses a challenge to the observer, as some plumages of some species are little studied, a fair percentage of the birds are in worn plumage, and hybrids occur regularly. In this photo, taken in late August 1998, from left to right are a juvenile Glaucous, adult Herring (*vegae*), one-year-old Glaucous-winged or hybrid (foreground), fourth-year *vegae*, and juvenile *vegae*.

Photo by Paul E. Lehman



Figure 12. Until the recent disappearance of most ice during that period, a substantial percent of the large Siberian-breeding population of Ross's Gull occurred every year between mid-September and mid-October at Barrow, Alaska. After mid-October, many of these birds are thought to move south through the Bering Strait to winter in the northern and central Bering Sea (Divoky et al. 1988) and perhaps in the Sea of Okhotsk. Residents at Gambell report small numbers on a regular basis in November or December. In 2001, the passage of an arctic front brought four record-early adults to Gambell beginning on 28 September (here one photographed on 1 October).

Photo by Don Cunningham



Figure 13. This Oriental Cuckoo represents one of two fall records at Gambell, where there are two July records as well. This bird, photographed on 23 August 1999, was distinguished from the Common Cuckoo (which has occurred at Gambell multiple times in late spring) by its underwing pattern and strongly buff undertail coverts. Possible distinguishing features include the darker slaty upperparts, primary projection, and bill shape; the width of the barring on the underparts is often *not* a safe distinction between the two species.

Photo by Tony Leukering

chatka and the Sea of Okhotsk (AOU 1998); most of the other Alaska records are likewise from fall (ABA 2002).

LESSER WHITETHROAT *Sylvia curruca*. Accidental. One photographed 8–9 Sep 2002 (ph. Lehman 2003, *Birding* 36:39, UAM) was the first Lesser Whitethroat recorded in North America. This Old World species is not known to breed farther east than the Lena River and just east of Lake Baikal; it winters from India to sub-Saharan Africa (Dement'ev and Gladkov 1954, Vaurie 1959).

WILLOW WARBLER *Phylloscopus trochilus*. Accidental. At least one bird present 25–30 Aug 2002 (ph. Lehman 2003, UAM; Figure 15) established the first record for North America. The sightings on 25 Aug, 26 Aug, and 29–30 Aug came from three separate areas up to 3 km apart, so it is possible that more than one bird was involved. This species breeds as close as the Anadyr River basin and winters in eastern and southern Africa (Dement'ev and Gladkov 1954, Vaurie 1959, Karhu 2004).

DUSKY WARBLER *Phylloscopus fuscatus*. Very rare visitor. One was present 21–24 Aug 1997. A total of four birds was found in 2002: 29–30 Aug, 8–9 Sep (ph. UAM), 8–10 Sep, and 19 Sep. One was seen 14 Sep 2003, and one was present 3–4 Sep 2004 (ph. NAB, UAM). This total constitutes over half of Alaska's fall records of the Dusky Warbler. This species breeds as close as the Anadyr River basin (AOU 1998).

YELLOW-BROWED WARBLER *Phylloscopus inornatus*. Casual visitor. A bird present 23–24 Sep 1999 (ph. Lehman 2000a,c, UAM) established the first record



Figure 14. Middendorff's Grasshopper-Warbler is a member of the skulking genus *Locustella* and breeds no farther north than central Kamchatka, yet there are now one summer and three fall records of this species at Gambell, plus an additional autumn report of an unidentified grasshopper-warbler. There are also records of Middendorff's from Nunivak, St. Paul, Buldir, and Attu islands. This individual was in Gambell's "near boneyard" on 29 August 1996.

Photo by John C. Wilson

for North America; another was found 30 Aug 2002 (ph. NAB 57:104, UAM). This Siberian species nests as close as the western Anadyr River basin (Dement'ev and Gladkov 1954, Vaurie 1959).

ARCTIC WARBLER *Phylloscopus borealis*. Uncommon to fairly common migrant. This species is one of the trans-Beringian passerines that migrate from the Alaska part of their breeding range back to the Old World for the winter (to southeast Asia). During my study it was present almost daily in small to moderate numbers from mid-August through early September, with high counts of 29 birds on both 23 Aug 2002 and 27 Aug 2003. Seasonal totals ranged from only three birds in 2000 and 14 in 2001 to 74 in 2002, 72 in 2003, and 70 in 2004. Fay and Cade (1959) noted this species at Gambell 8 Aug 1953. The latest records are of eight birds 15 Sep 2002, with one remaining 16 Sep, and one 15–16 Sep 2003. Presumably, almost all Arctic Warblers at Gambell are Alaska-breeding *P. b. kennicotti* (see UAM specimens), but nominate *borealis*, which breeds east to the interior of the Chukotskiy Peninsula (Portenko 1989; called *hylebata*), should occur at least casually as well. Winker et al. (2002) reported a specimen (UAM) of the nominate subspecies collected 11 Jul 1985 on St. Matthew Island. The Asian race *P. b. xanthodryas* nests north to Kamchatka; in Alaska it has been recorded to date only in the Aleutians (Gibson and Kessel 1997). Although the Arctic Warbler is not known to breed on SLI, Fay and Cade (1959) mentioned a 1 Jul 1953 sighting at Gambell of a bird entering a small hole beneath some rocks and so thought possibly to be nesting.



Figure 15. This Willow Warbler was at Gambell from 25 to 30 August 2002 (photographed here on 26 August) and was the first recorded in North America. Note the plain slightly greenish upperparts, pale supercilium, pale yellow wash to the sides of the throat and upper breast, and the long primary extension almost equal to the length of the tertials. The fall of 2002 at Gambell produced an amazing three first records for North America, the others being of the Lesser Whitethroat and Spotted Flycatcher.

Photo by George L. Armistead

RED-BREASTED FLYCATCHER *Ficedula parva*. Casual visitor. One on 19 Sep 2004 (ph. UAM) established the first fall record for Alaska. This species has been recorded at Gambell once in spring (King et al. 1978). It nests northeast to the western Anadyr River basin (ABA 2002).

SPOTTED FLYCATCHER *Muscicapa striata*. Accidental. One on 14 Sep 2002 (ph. Lehman 2003, UAM) established the first North American record. This Old World species breeds no closer than Lake Baikal and winters in central and southern Africa (Dement'ev and Gladkov 1954, Vaurie 1959).

SIBERIAN RUBYTHROAT *Luscinia calliope*. Casual visitor. A male 24 Sep 2001 established the northernmost of the few fall records for the Bering Sea (NAB 56:91). This species breeds northeast to the northern Anadyr River basin (AOU 1998). It is more regular, though not annual, as a visitor to Gambell in spring.

BLUETHROAT *Luscinia svecica*. Uncommon migrant. During my study this trans-Beringian passerine occurred regularly in small, rarely moderate, numbers between mid-August and early September. Single-day maxima were of 19 on 25 Aug 1997 and 14 on 28 Aug 1998. Seasonal totals ranged from highs of 21 in 1997 and 28 in 1998 to lows of three in 2000 and five in 2002. The latest record is for 13 Sep (1999).

NORTHERN WHEATEAR *Oenanthe oenanthe*. Rare breeder and fairly common migrant from mid-August to the beginning of September. Single-day maxima were

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65 on 25 Aug 1997 and 45 on 27 Aug 1998. Seasonal totals ranged from 26 in 2000 to 122 in 1998, although no other high exceeded 57. The latest record was 17 Sep (2002). Fay and Cade (1959) noted one to six seen daily at Gambell during the second and third weeks of August 1953 and in July and September 1956. Sealy et al. (1971:327) described the wheatear in August 1958 and 1968 as being unusually abundant and seen "about as often as the very common Snow Bunting." There are a few breeding records for SLI, including at Gambell (Kessel and Gibson 1978).

[STONECHAT *Saxicola torquatus*. There is an undocumented report of one bird seen briefly 8 Sep 1992 (AB 47:135). There are approximately five spring records at Gambell (J. L. Dunn in litt.). Alaska records refer to the subspecies *stejnegeri* (Gibson and Kessel 1997) or at least to the *maura* subspecies-group, the Siberian Stonechat (ABA 2002).]

GRAY-CHEEKED THRUSH *Catharus minimus*. Uncommon migrant. This trans-Beringian species breeds west to the Chukotskiy Peninsula (Portenko 1989, Karhu 2004), with this population returning to the Americas for the winter (Kessel and Gibson 1978). During my study it occurred in small numbers every year between late August and mid-September. Most seasonal totals ranged from 3 to 15, with a high of 28 tallied in 2003; the single-day maxima were eight on 29 Aug and seven on 6 Sep 2003. The latest date was 18 Sep (2001). An earlier bird was at Savoonga 16 Aug 2004 (L. Sheffield in litt.).

SWAINSON'S THRUSH *Catharus ustulatus*. Casual visitor. In 2004, four birds were found on 7 Sep (ph. NAB, UAM), with one remaining on 10 Sep; another was present 8 Sep (ph. UAM), and two were seen 18 Sep. These birds, and one on St. Paul Island during the same period—10–11 Sep 2004 (NAB 59:132)—are the first recorded in fall around the Bering Sea. There are two spring records at Gambell (J. L. Dunn in litt.). This species breeds northwest to central Alaska (Gabrielson and Lincoln 1959) and is very rare or casual on the Seward Peninsula (Kessel 1989).

HERMIT THRUSH *Catharus guttatus*. Very rare visitor. Eight individuals were recorded: 30 Aug 1993, 13–15 Sep 2001 (ph. UAM), 16 Sep 2003 (ph. UAM), up to two 6–12 Sep 2004 (ph. UAM), and 15 Sep, 27 Sep, and 3 Oct 2004. There are some 15 or more spring records, making the Hermit Thrush one of the more regular vagrants from the mainland at that season (J. L. Dunn in litt.). It nests north to central Alaska but only rarely close to the western coast (Kessel 1989).

EYEBROWED THRUSH *Turdus obscurus*. Casual visitor. One individual was seen on 25 Sep 2004. This species is predominantly a spring vagrant to western Alaska, with only a few previous fall records for the state. It nests northeast to Kamchatka (AOU 1998).

AMERICAN ROBIN *Turdus migratorius*. Casual visitor. Five fall records of single birds: 21 Aug 1967 (Sealy et al. 1971), 30–31 Aug and 5–6 Sep (ph. UAM) 1998, and 18 Sep (ph. UAM) and 3 Oct 2004. This species breeds on the adjacent Alaska mainland (Kessel 1989).

SIBERIAN ACCENTOR *Prunella montanella*. Very rare visitor. One was found at Kangee Camp, north-central SLI, 13 Oct 1936 (Murie 1938). Since 1999 there have been seven records involving eight individuals at Gambell: 2 Oct 1999, 21–26 Sep 2001 (ph. NAB 56:128, UAM; Figure 16), 29–31 Aug 2002 (ph. UAM; early), 8–9 Sep 2002 (ph. NAB 57:144, not "8–9 Dec," UAM), 1 Oct 2002 (ph. UAM), at least one 3–22 Sep 2003 (ph. UAM), and two others 15 Sep 2003 (ph. UAM), one of which remained through 22 Sep. Most Alaska records of the Siberian Accentor are from fall on the Bering Sea islands. This species breeds northeast to the Anadyr River basin (Portenko 1989).

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EASTERN YELLOW WAGTAIL *Motacilla tschutschensis*. Fairly common migrant. This trans-Beringian passerine likely occurs in peak numbers between early and late August. Sealy et al. (1971) reported several large flocks, some containing at least 200 birds, during August 1966 and August 1967, with smaller flocks in mid-August 1969. One was near Savoonga 31 Jul 2003 (L. Sheffield in litt.). On St. Matthew Island, migrants have been noted as early as 5 Aug, with maximum counts in mid-August (Winker et al. 2002). Recent seasonal totals at Gambell range from a low of 22 in 2000 to a high of 150 in 1992. With coverage in 2004 commencing in mid-August, however, the season's total was 220, including 130 on 17 Aug. The species was uncommon by mid-September, and the late date was 19 Sep (1999 and 2003). A full albino was photographed 18–20 Aug 2004 (ph. UAM). The Eastern Yellow Wagtail breeds in western Alaska (Kessel 1989) and is probably a rare breeder on SLI (Sealy et al. 1971). There are no fall records of the Kamchatka subspecies *simillima*, which has occurred a few times in late spring and summer (Sealy et al. 1971).

WHITE WAGTAIL *Motacilla alba*. Uncommon to fairly common breeder. The species was first confirmed nesting at Gambell in 1953 (Fay and Cade 1959), and the subspecies *M. a. ocularis* was a regular breeder and migrant through 1999, and again in 2003 and 2004. Johnson (1976) counted nine pairs in 1973. Two birds remained on 11 Sep 1975 (Kessel and Gibson 1978). In 1989 family groups of local breeders totaled >35 birds on 31 Aug, a high count for Alaska (AB 44:143). There were as many as 30 individuals in late August and early September 1992, up to 15 in late August 1993, a total of 14 in late August and early September 1997, and 13 in late August and early September 1998. These birds were also thought to be local breeding adults and their young. In autumn 1999, however, only four birds were seen, and none were seen in 2000, 2001, and 2002, except for a single immature 12–14 Sep 2001 (ph. UAM). In late August and early September 2003, the total of four birds (ph. UAM) included a fledged juvenile accompanying an adult; one individual remained through 15 Sep. In 2004, a total of 14 birds, including six juveniles, was seen between mid-August and early September (ph. UAM); three birds were seen leaving the point toward Siberia on the morning of 27 August, and the last one or two individuals remained through 18 Sep, the latest date.

BLACK-BACKED WAGTAIL *Motacilla lugens*. Casual visitor. A female believed to be a Black-backed Wagtail and accompanied by a fledged juvenile was present from at least 23 Aug to 3 Sep 1998. There are several spring records of the Black-backed Wagtail and two records of single Black-backed paired with White Wagtails, in May–June 1990 (AB 44:481) and May–June 2004 (J. L. Dunn in litt.). This species does not normally breed northeast of Kamchatka and the Sea of Okhotsk (AOU 1998). Many authors (e.g., Cramp 1988, OSJ 2000, Alström and Mild 2003) have maintained *lugens* as a subspecies of *M. alba* or have recommended lumping it with the White Wagtail; the Alaska Checklist Committee recently relegated *lugens* to the rank of subspecies as well (Gibson et al. 2003).

TREE PIPIT *Anthus trivialis*. Casual visitor. One on 21 and 27 Sep 2002 (ph. *Birding* 35:18, UAM) established the third record for North America. The second record also came from Gambell, 6 Jun 1995 (FN 49:293). This Eurasian species breeds east only as far as the Kolyma River (ABA 2002).

OLIVE-BACKED PIPIT *Anthus hodgsoni*. Casual visitor. One found 5–6 Sep 2000 (ph. UAM) established the first fall record for the Bering Sea north of the Aleutians (NAB 55:90); there are now fall records from the Pribilof Islands as well. There are over six spring records for Gambell. This Eurasian species breeds northeast to the southern Koryak Highlands (Dement'ev and Gladkov 1954, Vaurie 1959).

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PECHORA PIPIT *Anthus gustavi*. Casual visitor. A total of three birds was present 9–14 Sep 2003: two on 9 Sep, with one remaining through 14 Sep, and another 10–14 Sep (ph. UAM). These made the first fall records for Alaska (NAB 58:128). Another four birds were found in 2004: one 24 Aug–1 Sep (ph. NAB, UAM, Figure 17A) was joined by a second bird 30 Aug–1 Sep, a third bird was found 4–6 Sep (ph. UAM, Figure 17B), and a fourth was present 19 Sep. This species nests northeast to the Chukotskiy Peninsula (Portenko 1989, AOU 1998, Karhu 2004).

RED-THROATED PIPIT *Anthus cervinus*. Uncommon fall migrant, rare spring migrant, and rare breeder. Birds advertising territories and carrying nesting material have been seen around Gambell, particularly on Sevuokuk Mountain, during multiple years in June (AB 29:1020, Kessel and Gibson 1978). An adult accompanied by up to three juveniles—some begging—were there 15–20 Aug 2004 (ph. UAM). A juvenile female was collected at Gambell 18 Aug 1958 (Sealy et al. 1971). As a fall migrant, the Red-throated Pipit was fairly numerous during some years of my study, such as 1992 (total of 40 seen 22–27 Aug) and 2003 (total of 94), but scarce in other years, such as 2000 (only nine tallied). Daily maxima included 20–28 birds on 23 and 24 Aug 1992, 25 on 31 Aug 1993, 26 on 22 Aug 2003, and 40 on 28 Aug 2003. The latest records were of single individuals remaining through 27 Sep 1999 and 24 Sep 2001. There are only several fall records of adults with orange-red throats; one on 21 Sep 2003 was late for a bird in that plumage.

AMERICAN PIPIT *Anthus rubescens*. Uncommon migrant. Two subspecies are thought to occur at Gambell. *A. r. pacificus* breeds in Alaska and probably in small numbers on SLI (Sealy et al. 1971). During my study migrants apparently of *pacificus* were found between mid-August and mid-September, and most seasonal totals ranged from 11 to 17 individuals, with 31 in 2003. The daily maximum was 25 on 28 Aug 2003. The latest record was 1–4 Oct (2004; up to two birds). Birds look-



Figure 16. With autumn coverage at Gambell lasting for six weeks or more in 1999, 2001, 2002, 2003, and 2004, the Siberian Accentor is proving to be a nearly annual fall visitor, with at least eight island records. As many as three individuals have been found in a season at Gambell, and the first two records for the Pribilof Islands were made in 2003 during St. Paul's first-ever autumn survey. Yet the species is unrecorded in Alaska during spring. This individual was at Gambell 21–26 September 2001 (photographed here on the first day).

Photo by Paul E. Lehman



Figure 17. Pechora Pipits at Gambell (A) 24 August–1 September (here 26 August) 2004 and (B) 4–6 September (here 6 September) 2004. Compared to the Red-throated Pipit, the Pechora shows bolder, sharper crown and back markings, little if any contrast between the nape and crown, warmer tones to the head, bolder white wingbars, a cleaner buff wash to the breast contrasting with a whitish throat and belly, a slightly thicker, fleshier-based bill, a faint dark loreal line, and—very important—two or three primary tips visibly extending past the longest tertial. The bird in (B) is particularly warm-toned and boldly marked. This species usually remains silent when flushed or gives a rather sharp, short one- or two-syllabled call, unlike the thin *speee* given regularly by the Red-throated.

Photos by Brian L. Sullivan

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ing like the Asian subspecies *A. r. japonicus* were rare; the records were as follows: unknown number seen in late Aug 1993 (S. F. Bailey in litt.); 1 on 4 Sep 1993 (D. Cunningham in litt., ph. UAM); 1 from 29 Sep to 1 Oct 1999; total of 3 from 27 Aug to 10 Sep 2000 (G. Rosenberg in litt.); total of 3 from 1 to 9 Sep 2001; total of 7 from 23 Aug to 17 Sep 2002 (ph. UAM); an exceptional total of 25 from 27 Aug to 18 Sep 2003 (ph. UAM), with a high count of 13 from 30 Aug to 3 Sep, and an additional bird on 28 Sep; and a total of 7 from 28 Aug to 3 Oct 2004. Several birds that appeared intermediate between the two subspecies were seen annually as well. The taxonomy of American Pipits in this region is unsettled. Whereas some authors state that nominate *rubescens* breeds west from North America into northeast Asia (e.g., Vaurie 1959), others treat all northeast Asian populations as belonging to *japonicus* (e.g., Stepanyan 1990). Only *pacificus* breeds in Alaska according to Gibson and Kessel (1997). Further complicating matters, Portenko (1989) used the name *harmsi* (type specimen from Tashkent, Uzbekistan) for breeding populations of the Chukotskiy Peninsula and Anadyr River basin; this name was synonymized with nominate *rubescens* by Vaurie (1959) but with *japonicus* by Hall (1961). Alström and Mild (2003) tentatively restricted breeding *rubescens/pacificus* to North America, but they had no firm opinion.

[BOHEMIAN WAXWING *Bombycilla garrulus*. No records at Gambell, but three birds were found 29 Aug 1961 at Northeast Cape, at the opposite end of SLI (Kessel and Gibson 1978).]

TENNESSEE WARBLER *Vermivora peregrina*. Accidental. One on 22 Sep 2001 (ph. NAB 56:128, UAM) was the first recorded for the Bering Sea and western Alaska. This species is a rare visitor to Alaska, even to the southeast (Kessel and Gibson 1978).

ORANGE-CROWNED WARBLER *Vermivora celata*. Rare visitor. This species was first recorded at Gambell 20 Aug 1999 (ph. NAB 54:91, UAM), yet reports of 18 individuals accumulated from then through 2004. Sixteen of these were identified as the drab subspecies *V. c. celata* (ph. UAM), which breeds on the adjacent Alaska mainland (Kessel 1989), between 16 Aug (2004) and 15 Sep (2004), including three on 8 Sep 2000 (NAB 55:90), four on 7 Sep 2004, and a season-high total of ten birds in 2004. Two birds appeared to be the more brightly colored subspecies *V. c. lutescens* from south-coastal Alaska and points southeast: 19 Sep 2001 and 22 Sep 2002. There are no spring records of this species.

NASHVILLE WARBLER *Vermivora ruficapilla*. Accidental. One photographed 5–7 Sep 2004 (ph. NAB, UAM) established the first documented record for Alaska (there were two previous sight reports from south-coastal Alaska). This species breeds no closer than southern British Columbia and southwestern Alberta (*V. r. ridgwayi*) and central Saskatchewan (*V. r. ruficapilla*) (Sibley 2003).

YELLOW WARBLER *Dendroica petechia*. Very rare visitor. First recorded on 31 Aug 1989 (AB 44:143), by 2004 the species totaled 12 records (ph. UAM) between 18 Aug (2004) and 19 Sep (2002). There are no spring records. It breeds on the adjacent Alaska mainland (Kessel 1989).

MAGNOLIA WARBLER *Dendroica magnolia*. Accidental. One found 21 Sep 2002 provided the third record for the Bering Sea and the first for SLI (NAB 57:104). This species is a rare but almost annual early-summer visitor to southeastern Alaska (Kessel and Gibson 1978).

YELLOW-RUMPED WARBLER *Dendroica coronata*. Casual visitor. The four found in fall were all Myrtle Warblers (*D. c. hooveri*): 26 Aug and 17 Sep (ph. UAM) 2001, 22 Sep 2002 (ph. UAM), and 3 Oct 2004. There are also several spring records. This species breeds west to western Alaska (Kessel 1989).

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TOWNSEND'S WARBLER *Dendroica townsendi*. Casual visitor. One was seen 14 Sep 2004, another 25–28 Sep 2004 (ph. UAM). There is also one spring record (NAB 58:420, ph. UAM). This species breeds north to south-coastal and west to east-central Alaska (Gabrielson and Lincoln 1959).

BLACKPOLL WARBLER *Dendroica striata*. Casual visitor. There is one record: 26 Aug 1992 (ph. UAM). This species breeds in western Alaska (Kessel 1989).

AMERICAN REDSTART *Setophaga ruticilla*. Accidental. One present 18–19 Sep 2004 (ph. NAB, UAM) was the first recorded in the Bering Sea region. This species breeds north only to southeastern Alaska (Gabrielson and Lincoln 1959).

NORTHERN WATERTHRUSH *Seiurus noveboracensis*. Casual visitor. Individuals were seen 15 Aug and 19 Aug 2004 (ph. UAM). There are only three other records for islands in the Bering Sea: two from Gambell in spring (Kessel and Gibson 1978, J. L. Dunn in litt.) and one from St. Paul Island in fall (NAB 59:132). This species breeds on the adjacent Alaska mainland (Kessel 1989).

MACGILLIVRAY'S WARBLER *Oporornis tolmiei*. Accidental. One found 26 Sep 2002 (ph. UAM) was presumably the same bird seen also 29 Sep, the first recorded for the Bering Sea region (NAB 57:104). The species breeds north only to southeastern Alaska (Gabrielson and Lincoln 1959).

WILSON'S WARBLER *Wilsonia pusilla*. Rare visitor. First recorded on SLI in 1935, with a specimen collected (UAM 2903, *W. p. pileolata*) east of Savoonga 6 Sep and three additional birds seen there during the previous week (Murie 1936). Sealy et al. (1971) cited four birds at Gambell 28–31 Aug 1966 and one on 30 Aug 1967. From 1994 through 2004, 18 (ph. UAM) were found between 18 Aug (2004) and 22 Sep (2003), with a high count of six on 19 Aug 2004. There are probably no spring records (J. L. Dunn in litt.). This species breeds on the adjacent Alaska mainland (Kessel 1989).

AMERICAN TREE SPARROW *Spizella arborea*. Very rare visitor. A total of six birds: single individuals 31 Aug 1966 (Sealy 1967), 21–22 Sep 1999, and 29 Aug–1 Sep 2000 (ph. UAM), and up to three from 7 to 9 Sep 2004 (ph. UAM). This species also is very rare in spring. It breeds on the nearby Alaska mainland (Kessel 1989).

CHIPPING SPARROW *Spizella passerina*. Very rare visitor. Gambell has a surprising eight fall records of this species, which breeds no closer than east-central and southeastern Alaska (Kessel and Gibson 1978): 30–31 Aug 1998 (ph. UAM), 19–21 and 29 Sep 1999, 14 and 29 Sep (ph. UAM) 2002, 16–19 Sep (ph. UAM) and 3 Oct 2003, and 3 Oct 2004. All birds were juveniles. The only other Bering Sea records are of one in spring at Gambell (Fay and Cade 1959) and one in fall on St. Paul Island (NAB 59:132).

CLAY-COLORED SPARROW *Spizella pallida*. Accidental. One on 20 Sep 2003 (ph. UAM) established the first record for western Alaska and only the fifth for the entire state (NAB 58:128). This species breeds no closer than northeastern British Columbia and extreme southwestern Northwest Territories (Sibley 2003).

SAVANNAH SPARROW *Passerculus sandwichensis*. Rare to uncommon visitor. This species was probably the most regular fall (and spring) vagrant from the adjacent Alaska mainland. From 1994 through 2003 one to nine birds were found annually between late August and late September. In 2004, coverage beginning in mid-August produced a surprising 20–42 birds daily from 16 to 20 Aug (peak count on 17 Aug); the season total was 64 birds through 17 Sep (with 17 more around Savoonga 21–27 Aug; NAB 59:132). An earlier bird was seen at Gambell 1 Aug 1966 (Sealy 1967). Single late birds occurred 8–10 Oct 2001 (D. Cunningham in litt., ph. UAM) and 3 Oct 2003.

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FOX SPARROW *Passerella iliaca*. Rare visitor. Surprisingly, there are more records at Gambell of the Sooty Fox Sparrow (*unalaschcensis* subspecies group), which breeds no closer than the Alaska Peninsula and south-coastal Alaska (Gibson and Kessel 1997), than of the red Yukon Fox Sparrow (*P. i. zaboria*), which breeds on the adjacent Alaska mainland (Kessel 1989). Fall reports of the Sooty totaled 11 as follows: up to two 29–30 Aug 1993, and then nine individuals (ph. UAM) 1997–2004 between 18 Aug (2004) and 29 Sep (2002). The seven of the red subspecies were found 16 Sep 1999 (ph. UAM), 22–25 Sep 2001 (ph. UAM), 5–11 Sep 2004 (up to three; ph. UAM; Figure 18), 20 Sep 2004, and 3 Oct 2004. In addition, single intermediate birds were photographed 25 Sep 2002 (ph. UAM) and 22 Sep 2003 (ph. UAM). This species is casual in spring, with all records at that season involving Sooty Fox Sparrows (J. L. Dunn in litt.).

LINCOLN'S SPARROW *Melospiza lincolnii*. Casual visitor. Three fall records: 26 Sep 2001 (ph. UAM), 9–11 Sep 2003 (ph. UAM), and 19 Sep 2003. This species also is casual in spring. It breeds northwest to central Alaska (Gabrielson and Lincoln 1959).

WHITE-CROWNED SPARROW *Zonotrichia leucophrys*. Rare visitor. This species



Figure 18. During the autumn—particularly between mid-August and the beginning of October—a substantial number of landbirds from mainland Alaska wander offshore to the Bering Sea islands, more so than in spring. One such wanderer was this Fox Sparrow, subspecies *zaboria*, photographed at Gambell on 6 September 2004. This subspecies nests on the adjacent Seward Peninsula, and there are seven fall records of this form at Gambell. Surprisingly, there are more sightings of Sooty Fox Sparrows (*unalaschcensis* subspecies group), although these birds nest much farther to the south, only as close as the Alaska Peninsula and south-coastal Alaska.

Photo by Brian L. Sullivan



Figure 19. Like the Siberian Accentor, the Little Bunting is proving to be an annual or near-annual fall visitor at Gambell, with ten records there since 1993, but no spring records. There are also two fall records for coastal California. This individual was present from 26 to 29 August 1996, photographed here on its first day.

Photo by John C. Wilson

occurred in fall annually in numbers ranging from one to seven individuals per year, except for 19 in 2004, when the high count per day was eight on both 7 and 9 Sep. The earliest record is of one collected 15 Aug (1961; Sealy et al. 1971); the latest is 3 Oct (2004; two birds). All birds have been immatures except for one adult 12 Sep 2001. Three specimens collected in late August and early September 1966 and 1968 were *Z. l. gambelii* (Sealy et al. 1971), a common breeder on the adjacent Alaska mainland (Kessel 1989); all Gambell records apparently involve this subspecies. In spring the White-crowned Sparrow is only casual on SLI.

GOLDEN-CROWNED SPARROW *Zonotrichia atricapilla*. Rare visitor. Twenty-three birds, all immatures, have been found in autumn, all since 1993 (ph. UAM). The records fall between 29 Aug (1993 and 2000) and 3 Oct (2004; four birds), including a high count of seven birds on 9 Sep 2004 and a total of 14 for that season. An early bird was at Savoonga on 24 Aug 2004 (L. Sheffield in litt., ph. UAM). This species is casual in spring. It is a common breeder on the adjacent Alaska mainland (Kessel 1989).

DARK-EYED JUNCO *Junco hyemalis*. Casual visitor. The fall records are all of Slate-colored Juncos (subspecies nominate *hyemalis*): 10 Sep 1966 (Sealy et al. 1971) and 7–11 Sep 2004 (total of three; ph. UAM). In addition, Fay and Cade (1959) saw one at Savoonga 28 Nov 1954, and single individuals were there in late Sep and mid-Oct 1980 (AB 35:215). This species is very rare or casual in spring. It breeds west to western Alaska (Kessel 1989).

LAPLAND LONGSPUR *Calcarius lapponicus*. Common breeder and migrant. This species is the most numerous passerine on SLI (Fay and Cade 1959). Daily counts between mid-August and early September typically averaged 100–300 birds, with an



Figure 20. Both Common and Hoary Redpolls are found on St. Lawrence Island in late summer and fall, although their numbers vary from year to year. Only the Hoary has been documented in late fall and winter and as nesting on the island, including one nest at Gambell that was still active in late August 2004. Juvenile birds, such as this one, may be very difficult to identify in the field, as some young birds watched begging from adult Hoaries showed an apparent bill size and shape normally associated with the Common Redpoll. This juvenile Hoary, photographed on 30 August 2004, shows a bill typical of its species.

Photo by Brian L. Sullivan

increase in early September as migrants congregated around Gambell. High counts reached 400–500. During the first half of September small-to-medium-sized flocks were seen leaving the island toward Siberia, particularly in the early morning during fair weather and light winds. The species was uncommon in late September, with the last birds noted through 29 Sep (1999 and 2002) and on 3 Oct (2003).

LITTLE BUNTING *Emberiza pusilla*. Very rare visitor. Between 1993 and 2004, ten Little Buntings were found at Gambell, constituting over half the records for North America: 4 Sep 1993 (ABA 2002, ph. UAM); 26–29 Aug 1996 (FN 51:104; Figure 19); 24 Sep 1999; 19–24 Sep 2001; 10–11 Sep and 30 Sep–2 Oct (ph. NAB 57:104, UAM) 2002; 25 Aug, 27 Aug, and 2–4 Sep (ph. UAM) 2003; and 7 Sep 2004 (ph. UAM). This species breeds northeast to the northern Anadyr River basin (AOU 1998).

REED BUNTING *Emberiza schoeniclus*. Accidental. One photographed 28–30 Aug 2002 (ph. NAB 57:144) established the first record north of the Aleutians and the first fall record for Alaska (NAB 57:104). This species breeds northeast only to Kamchatka (AOU 1998).

SNOW BUNTING *Plectrophenax nivalis*. Common breeder and migrant. This is the second most numerous passerine on SLI (Fay and Cade 1959). Daily counts from mid-August through mid-September averaged 100–250 individuals, with some counts reaching 600; up to 1000–1400 were seen daily 2–5 Sep 2004. Like Lapland

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Longspurs, Snow Buntings accumulated around Gambell during September, and flocks departed the island toward Siberia. By late September, maximum counts were usually of <20 birds and the species was seen only sporadically. In 2002 and 2003, only two to four birds remained irregularly late in September, but then migrant flocks of 20 to 30, containing McKay's Buntings (see below), occurred 30 Sep–1 Oct 2002, 3 Oct 2003, and 30 Sep–4 Oct 2004. Two birds remained on 1 Nov 2004 (H. Irrigoo pers. comm.). Fay and Cade (1959) stated that small numbers might overwinter on SLI; the species is rare in winter on the Seward Peninsula (Kessel 1989).

McKAY'S BUNTING *Plectrophenax hyperboreus*. Rare migrant. Exact status uncertain because of possible hybrids with the Snow Bunting. Single birds were seen 23 Aug 1992, 7–9 Sep 1992 (D. Sonneborn in litt.), and 21–27 Aug 1994 (M. Heindel in litt.), up to two were present 8–12 Sep 2000 (G. Rosenberg in litt.), and one was photographed 22 Sep 2001 (ph. NAB 56:128, UAM), as was one on 30 Aug 2002 (ph. UAM). Late flocks of newly arrived Snow Buntings contained seven McKay's both 30 Sep–1 Oct 2002 (ph. UAM) and 3 Oct 2003. In 2004, an early McKay's was seen 30 Aug (P. W. Sykes pers. comm.), and three were with Snow Buntings on 30 Sep followed by an exceptional 55 McKay's on 1 Oct (one of the largest counts ever away from St. Matthew and Hall islands). Fifteen remained 2–4 Oct, five on 14 Oct (H. Irrigoo pers. comm.). Local residents reported that small-to-medium numbers may linger during October in beach grass south of the village. This species occurs at Gambell annually in small numbers in spring; it is at best a very rare and irregular breeder on SLI as well. It winters along the mainland coast from Kotzebue Sound south to the Alaska Peninsula (Kessel and Gibson 1978).

RUSTY BLACKBIRD *Euphagus carolinus*. Casual visitor. One was photographed 13 Sep 2004 (ph. UAM). In addition, a bird was collected on the Putgut Plateau, west-central SLI, 25 Oct 1960 (Sealy et al. 1971). There is a spring specimen from Gambell (UAM 2927; Kessel and Gibson 1978). This species breeds in western Alaska (Kessel 1989).

BROWN-HEADED COWBIRD *Molothrus ater*. Casual visitor. Single juveniles were photographed 6–7 Sep 1998 (ph. NAB 53:91, UAM) and 21–22 Aug, 30–31 Aug (ph. NAB), and 6–7 Sep 2004 (all ph. UAM), providing the only records for Bering Sea islands. This species is a rare but regular visitor north to Alaska (Kessel and Gibson 1978).

BULLOCK'S ORIOLE *Icterus bullockii*. Accidental. One in female plumage 3 Oct 2004 was approximately the fifth Bullock's Oriole reported in Alaska, but in the absence of a specimen or recognizable photo the species remains on the state's list of "unsubstantiated" taxa. It breeds north to southern British Columbia (Sibley 2003).

BRAMBLING *Fringilla montifringilla*. Very rare visitor. Fall records were as follows: up to three from 2 to 8 Sep 1998 (not "6–7 Sep"—NAB 53:91; ph. UAM), up to two from 8 to 13 Sep 2000 (NAB 55:91), total of four between 17 and 26 Sep 2001 (ph. UAM), and one from 9 to 16 Sep 2003 (ph. UAM). The first were the earliest recorded in Alaska in fall. This species occurs almost annually in spring. It breeds northeast to the western Anadyr River basin (AOU 1998).

COMMON ROSEFINCH *Carpodacus erythrinus*. Casual visitor. Three fall records, all of single birds: 27–29 Aug 1996 (FN 51:104, ph. UAM), 10 Sep 2000 (NAB 55:91, ph. UAM), and 1–2 Sep 2003 (ph. NAB 58:128, UAM). There are several spring records, one of a flock of up to 18 birds (Kessel and Gibson 1978). This species breeds northeast to the Koryak Highlands (Dement'ev and Gladkov 1954, Vaurie 1959).

PURPLE FINCH *Carpodacus purpureus*. Accidental. One female/immature male was photographed 7–9 Sep 2004 (ph. NAB, UAM). A specimen of the nominate

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subspecies, which breeds north to northern British Columbia and southern Yukon (Sibley 2003), was collected at Savoonga 5 Jun 1984 (UAM 5559; Gibson and Kessel 1992) and is the only other record for the Bering Sea. The Purple Finch is casual anywhere in Alaska (Kessel and Gibson 1978).

RED CROSSBILL *Loxia curvirostra*. Casual visitor. Two birds collected near Gambell on 15 Aug 1961 were identified as *L. c. sitkensis* (= *minor*), and from 26 to 29 Jul 1962 eight specimens were obtained and three additional birds were seen (Sealy et al. 1971). In 2003, an irruption year, this species appeared at Gambell beginning on 2 Jul, with up to 30 birds found later in the month (NAB 57:533) and up to three remaining 21–29 Aug (ph. UAM). In addition, two were near Savoonga 24 Aug 2003 (L. Sheffield in litt.). This species is found regularly no closer than south-coastal and possibly southwestern Alaska, although it has a history of wandering to the Bering Sea islands (Kessel and Gibson 1978).

[**WHITE-WINGED CROSSBILL** *Loxia leucoptera*. Casual visitor. A bird collected near Gambell 26 Jul 1962 was assigned to the nominate race from North America; another was seen 29 Jul 1962 (Sealy et al. 1971). This species breeds through central Alaska (Gabrielson and Lincoln 1959).]

COMMON REDPOLL *Carduelis flammaea*. Uncommon to fairly common visitor, though irregular. During my study this species was generally outnumbered by the Hoary Redpoll, particularly after early September. Some years very few or no birds occurred; in other years daily counts reached up to 25. Six birds were present at my arrival on 14 Aug 2004. The highest counts were in 2003: up to 40 from 9 to 20 Sep and up to 65 from 25 to 27 Sep. The latest record was of 25 on 7 Oct (2003). Sealy et al. (1971) stated that there were no definite breeding records for the island. Portenko (1989) noted that the Common Redpoll does not breed on the Chukotskiy Peninsula. Some redpolls at Gambell are difficult to identify to species, including many juveniles and some apparently intermediate adults.

HOARY REDPOLL *Carduelis hornemanni*. Uncommon to fairly common, though irregular, visitor and rare breeder. Sealy et al. (1971) cited two nest records at Gambell in June 1967. A nest in the village during 2004 did not fledge its three young until 26 Aug (ph. UAM). This species was more numerous than the Common Redpoll beginning in mid-September. Some years very few or no birds occurred, whereas in others there were flocks of up to 20–40. Small to moderate numbers remained through early October (e.g., 22 on 7 Oct 2003); later records include one collected at Gambell 16 Oct 1930 (Friedmann 1932) and four birds collected at an unknown locality on SLI 3 Nov 1959 (Sealy et al. 1971). Local residents have reported redpolls into the winter, e.g., two birds remained through Feb 2003 (H. Irrigoo pers. comm.). Some redpolls at Gambell are difficult to identify to species, including many juveniles (Figure 20) and some adults.

PINE SISKIN *Carduelis pinus*. Casual visitor. A mid-summer or early fall wanderer at Gambell 19–26 Jul 1964 was an example of nominate *pinus* (Sealy et al. 1971). In autumn 1999, when this species—a regular breeder north only to south-coastal, very rarely central, Alaska (Kessel and Gibson 1978)—irrupted north into central Alaska, a total of four birds wandered to Gambell: one on 24 Aug, one on 3 Sep (ph. UAM), and up to two from 9 to 18 Sep. A single bird was seen 26 Sep 2001 (NAB 56:92, ph. UAM). In 2003, another irruption year, up to three were present 21 Aug–12 Sep (ph. UAM), up to five were seen 22–23 Sep (ph. UAM), and one was found 2–4 Oct (ph. UAM).

[**AMERICAN GOLDFINCH** *Carduelis tristis*. A report of three birds near Gambell 10 Aug 1964 (Sealy et al. 1971) was probably in error. This species is casual in Alaska, with a few records of single birds in the southeastern and south-coastal parts of the state (e.g., see Gibson and Kessel 1992).]

THE FALL MIGRATION

Fall migration at Gambell, and in most of western Alaska, has received less attention than has spring migration. A likely reason is that fall migration is more protracted than the shorter, more concentrated “pulse” in spring. In spring, the “window” of passage is narrow; birds must not arrive on the arctic breeding grounds so early that conditions are still too cold and frozen, or so late that the best breeding sites are all taken or their broods would fledge too late. In spring the peak seasons for waterfowl, shorebirds, and passerines overlap substantially. But the peak of southbound shorebirds (between July and early September) is largely over before most vagrant passerines occur (late August through early October). Another factor is the increased difficulty in finding migrants and vagrants at low density in the relatively lush vegetation of early fall. In spring, there is only sparse cover provided by dead plants, and remaining snow further concentrates migrants in those open patches already thawed. In the Bering Sea region, Gambell’s recent, regular, and extensive autumn coverage did not begin until the 1990s; St. Paul Island in the Pribilofs received its first detailed fall surveys only in 2003 and 2004; and St. George and St. Matthew islands have yet to be censused extensively at this season in any year.

Recent autumn coverage at Gambell has not begun in earnest earlier than 20 August, except in 2004, when it commenced on 14 August. Thus the early fall migration period is still poorly known. July and August are the peak period for southbound shorebirds; most adults have departed by early August. A number of species poorly represented in the existing data are probably regular migrants during this period. Several shorebirds that have occurred multiple times in spring, some almost annually, are unrecorded or represented by only a single record in fall. These include the Eurasian Dotterel, Common Greenshank (*Tringa nebularia*), Wood Sandpiper, Common Sandpiper (*Actitis hypoleucos*), Great Knot, Temminck’s Stint, Least Sandpiper, and Ruff. This difference is probably the result of the combination of the poor coverage of the island from July to mid-August and the overall lower numbers of several of these species in western Alaska in fall versus spring. Several other shorebirds, however, including the American Golden-Plover, Gray-tailed Tattler, and, especially, Sharp-tailed Sandpiper, occur more regularly in autumn than in spring. Among landbirds, a substantial percentage of the early trans-Beringian passerines, including the Arctic Warbler, Northern Wheatear, and, especially, Eastern Yellow Wagtail, are missed by observers arriving in late August. There also has been no recent autumn coverage after early October. As a result, accurate departure dates for a substantial number of species, particularly waterbirds, are not known, the late-autumn seabird migration remains poorly studied, and late-fall lingering and vagrant passerines remain largely undiscovered.

Autumn seawatching from the point (Figure 2) has lasted anywhere from 1 to 5 hours most days, with the average being 2 hours every morning beginning soon after dawn, when the best variety of species tends to occur. Another hour or more is often spent at some time later in the day (usually in the evening early in the fall, when peak numbers of auklets occur). As a result, the seabird data I report are based on incomplete, uneven coverage.

A full-time seawatch at this season would result in higher, more accurate totals.

The second half of August and the beginning of September are characterized by the continued presence of large numbers of nesting alcids, a good number and variety of shorebirds, peak numbers of most trans-Beringian passerines, and a variety of eiders and migrant jaegers. The early-autumn flight of Emperor Geese is most likely to take place very late in August. From one to a few strays from Asia and the North American mainland are typically found at this time (with exceptional numbers of the latter tallied in 2004). By the end of the first week of September, the smaller alcids have mostly finished breeding and have departed or moved offshore, most of the smaller shorebirds are gone, many of the trans-Beringian passerines (other than pipits) have passed, and Lapland Longspurs and Snow Buntings are staging in preparation for their flight northwest to Siberia. The immense numbers of Short-tailed Shearwaters just offshore may reach peak abundance. Records of vagrant landbirds from both Asia and North America increase. Shorebird diversity declines further in mid-September, but several seabirds, such as the Spectacled Eider, Yellow-billed Loon, and Black Guillemot, are now more likely to be seen. By late September, passerine diversity declines to just a handful of regular species—the Common Raven, Lapland Longspur (a few), Snow Bunting, and redpolls—but a late-lingering species or vagrant or two joins the list on a regular basis.

Most of the Old World vagrant passerines found at Gambell breed no farther to the northeast than Russia's Anadyr River basin (also referred to as "Anadyrland") or Koryak Highlands, located about 800 km west and >950 km southwest of St. Lawrence Island, respectively (Figure 1). Very few of these species breed as far north as the Chukotskiy (also written as Chukotsk, Chukchi, or Chukotski) Peninsula, where several species of Asian waterbirds that have occurred at Gambell do undoubtedly originate. Several vagrants have originated from populations even much farther away, such as the Lesser Whitethroat and Spotted Flycatcher in September 2002, which nest no closer than the Lena River and Lake Baikal regions, respectively, some 3500 and 4200 km distant. Some North American strays at Gambell must have originated from at least as far away as British Columbia, Alberta, or Saskatchewan (e.g., Nashville Warbler, Clay-colored Sparrow, and Bullock's Oriole).

The number and variety of migrant shorebirds and landbirds present at Gambell, as well as the numbers of seabirds visible off the point, are highly dependent on weather. Local weather data covering wind speed and direction, temperature, and cloud cover were collected by myself and others on a daily basis during visits between 1999 and 2004. Low overcast and rain tend to ground shorebirds and trans-Beringian migrants. Rain falling in the late-night and early-morning hours appears to be associated with good counts of landbirds and the appearance of vagrants. North and northeast winds often produce the largest numbers of seabirds close to shore. But those same winds tend to suppress the occurrence of most Asian strays, unless these winds are associated with a storm and accompanied by rain. My visit during the autumn of 1999 saw 29 of 45 days characterized by north and northeast winds, and only four Asian landbirds were found: an Oriental Cuckoo, a Siberian

Accentor, a Little Bunting, and a Yellow-browed Warbler, the first recorded in North America. In contrast, westerly to southerly winds dominated on 21 of 42 days in the fall of 2002, and that year produced an exceptional number and variety of stray Asian landbirds, including three first records for North America—of the Lesser Whitethroat, Willow Warbler, and Spotted Flycatcher—as well as an Oriental Cuckoo, a Sky Lark, four Dusky Warblers, a Yellow-browed Warbler, three Siberian Accentors, a Tree Pipit, a Reed Bunting, and two Little Buntings. These same winds probably also played a role, however, in a below-average season for seabirds and shorebirds. Winds from between the south and northeast are likely favorable for many strays from the North American mainland; for example, several multi-day periods characterized by such winds during autumn 2004 were associated with multiple, substantial fallouts of these species. But some rarities turn up in just about any weather: a number of Asian birds have been found on days with light easterly winds or following storms with stronger northeasterly winds and rain, and some North American strays have turned up on days with westerly or northerly winds. Sometimes overcast conditions with light and variable winds—including southerlies and southwesterlies—have produced few migrants or vagrants. There are, of course, factors other than the weather at work that shape a given year's migration. These include the timing and success of the nesting season, which can vary greatly from year to year in the Arctic, and such intangibles as chance and observer luck.

Fall birding in much of coastal Alaska is a pioneering effort, with still much to be learned. An extended autumn trip provides the potential for the thrill of discovery. The composition of rarities in fall is different from that in spring. For example, such landbirds as Middendorff's Grasshopper-Warbler, Dusky Warbler, Yellow-browed Warbler, Siberian Accentor, and Little Bunting are more likely to occur in Alaska during the fall than in spring. A substantially greater number of mainland North American breeding species wanders west or northwest out to the offshore islands in autumn than in spring. Also, a good understanding of the sizable fall seabird movements through the Bering Sea is still in its fledgling stage. Autumn visits to western Alaska also provide the opportunity to study and photograph a number of species in juvenal and fresh fall plumages not normally seen by many North American observers.

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