

## NEW DISTRIBUTIONAL AND OVERWINTERING RECORDS OF BIRDS FROM SOUTH-CENTRAL ALASKA

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One of the results of field studies of birds conducted in south-central Alaska, principally in the Cook Inlet region, over the past nine years has been the compilation of a number of new distributional and overwintering records. This is not remarkable, since the avifauna of this region, as well as that of south-central Alaska generally, is poorly known. Few ornithologists have visited this sector of the state, and their trips were necessarily brief and hurried.

Wilfred Osgood (1901) made a short trip into Cook Inlet in late August, 1900, stopping briefly at the Indian village of Tyonek and at the mining town of Hope. The Andrew J. Stone expeditions of 1901 and 1903 (Chapman, 1902, 1904; Figgins, 1904) were of longer duration and concentrated their activities, including the collection of specimens, in the Kachemak Bay area and lower Kenai Peninsula. Ira N. Gabrielson (1944; Gabrielson and Lincoln, 1959) passed through the region on four different occasions between 1940 and 1950 making notes and collecting specimens. Long-term investigation of the avifauna was begun by Williamson in 1955 and has continued to the present time.

The occurrence of species which might at first be considered unexpected is attributable at least in part to the unusual ecological conditions existing in this part of Alaska. The Cook Inlet region has been found to possess an overlap of two distinct floral types, interior coniferous forest dominated by black and white spruces (*Picea mariana*, *P. glauca*) and birch (*Betula papyrifera*), and moist coastal forest in which Sitka spruce (*P. sitkensis*) and hemlock (*Tsuga mertensiana*) predominate. Associated with this intermixing of vegetation types is an avifauna composed in part of birds characteristic of each, together with species found in both (Williamson and Peyton, 1962).

A number of species of birds of the coastal forest, such as the Red-breasted Nuthatch (*Sitta canadensis*) and Saw-whet Owl (*Aegolius acadicus*), formerly recorded only from much farther south, were apparently overlooked by earlier ornithologists, or they possibly have expanded their ranges in recent years.

Several species of alpine birds, such as the Wheatear (*Oenanthe oenanthe*) and Townsend Solitaire (*Myadestes townsendi*), have access to the Cook Inlet region from the north via the Talkeetna Mountains. The latter connect the Alaska Range of the interior with the Chugach Mountains at the head of Cook Inlet. These, in turn, are more or less continuous to the south with the Wrangell and St. Elias mountains although it is considered probable that the vast icefields present in the latter would serve as barriers to the distribution of such alpine birds from the south.

The overwintering records, chiefly of fringillid species, can be related to the generally mild winters over much of this area, characterized by a variable and frequently light snow cover. Some of these species are known to overwinter in regions having much more severe climates.

It seems appropriate to us to make some of this information available at the present time while reserving the bulk of the data for a detailed report to be published later. Records not obtained or verified by one or more of the authors are acknowledged in the appropriate species account. Subspecies were verified by comparisons

with series of specimens at the United States National Museum and the Museum of Vertebrate Zoology. The nomenclature follows that of the fifth edition of the American Ornithologists' Union Check-list (1957).

#### SPECIES LIST

*Oceanodroma furcata*. Fork-tailed Petrel. An individual of this species was found dead in a parking lot in downtown Anchorage on September 15, 1961. Considerable subcutaneous and intracranial hemorrhage indicated that the bird had struck something while in flight. The race *furcata* is known to breed in the Aleutian Islands and the race *plumbea* breeds in southeastern Alaska from the Alexander Archipelago southward (Gabrielson and Lincoln, 1959:88-89). No colonies are known from intermediate localities. When compared with a series of skins in the United States National Museum our specimen was found to possess a grayish-white throat and undertail coverts rather than white as in typical *furcata*. The general overall body color is also more gray than that of *furcata* but is not so dark as that of *plumbea*. We have tentatively identified this specimen as *furcata* toward *plumbea* indicating the possibility of origin in a breeding locality somewhere between southeastern Alaska and the Aleutian Islands. Other data from the specimen are: testis minute, light fat, weight 43.0 gm.

*Ardea herodias*. Great Blue Heron. A Great Blue Heron was seen by Edmund Heller at Hope in late August (Osgood, 1901:73) and, on October 2, 1961, one was collected on Potter Marsh, nine miles south of Anchorage (Rosenau, 1961:26-27), and the specimen turned over to us. Another bird was seen on December 23, 1962, over downtown Anchorage, and on April 9, 1963, individuals were seen in two different areas, downtown Anchorage and International Airport, by Williamson and Robert Weeden, respectively. It seems likely that the records for the winter of 1962-1963 involved only one or two birds. According to the A.O.U. Check-list (1957:42) the breeding range of this species extends southward from Yakutat Bay; however, Grinnell (1910:373-374) reported a specimen collected and several others sighted in Prince William Sound. We have found the Great Blue Heron overwintering at Seward (December), and at Cordova (December-February). It appears that this species is a regular resident of Prince William Sound and a not uncommon visitant in the Cook Inlet region.

*Aythya valisineria*. Canvasback. In Alaska this duck is known to breed only in the interior, principally in the Yukon River valley (Gabrielson and Lincoln, 1959:180), but there is also a possibility that it breeds in the valley of the Copper River. On May 4, 1960, a pair was found on a small pond in a marsh bordering the Knik River at Eklutna, 30 miles northeast of Anchorage. These birds engaged in a prolonged courtship flight. On May 11, on the same marsh, a pair was observed together with a lone drake. The unattached male was repeatedly chased from the vicinity of the female by her mate, and courtship flights again were observed. It was believed that the birds were settled on the marsh for breeding. Our only other observation was of two males at the outlet of Kenai Lake on May 12, 1962. However, James Branson of the United States Fish and Wildlife Service has informed us that Canvasbacks are commonly seen on the flats near the mouth of the Susitna River on Cook Inlet in both spring and fall, indicating that migration to and from Alaska occurs to some degree along the Pacific coast.

*Clangula hyemalis*. Oldsquaw. In southern Alaska the Oldsquaw is known to breed near Ugashik on the Alaska Peninsula and in the central Alaska Range (Gabrielson and Lincoln, 1959:202). On July 25, 1962, three females and 12 young were found on a small lake at the headwaters of the south fork of the Eagle River in the Chugach Mountains. The young were of three distinct sizes although they remained in one group attended by all the females. On another lake nearby were three other adults. This species has been seen twice in the Talkeetna Mountains: Schaller (MS) saw 20 on Clarence Lake and Ronald O. Skoog of the Alaska Department of Fish and Game saw several on Caribou Lake (elevation 4500 feet) between the Chickaloon and Talkeetna rivers. No evidence of breeding was obtained. It appears that the Oldsquaw may breed on alpine lakes throughout south-central Alaska.

*Buteo harlani*. Harlan Hawk. This hawk is presently known to occur in Alaska only in the

east-central and south-central (Copper River valley) districts, according to Gabrielson and Lincoln (1959:261), who also stated (p. 258) that in Alaska the Harlan Hawk "certainly does not occupy a definite geographical area, to the exclusion of other races of Red-tailed Hawks." On the contrary, we have found that the area west of the Copper River valley, including the Cook Inlet region and the Kenai Peninsula, is inhabited during the breeding season only by this "species" to the complete exclusion of the "typical" Red-tailed Hawk. This allopatry, together with the known interbreeding of *harlani* and *B. jamaicensis calurus* in the Copper River valley, would seem to argue for considering the two forms conspecific. Certainly the distribution of each in Alaska is poorly known, and any sympatry such as that alluded to, has never been well-substantiated. It is particularly important to sort out definite breeding records from those relating to migration or postbreeding wandering, as we feel we have done for the Cook Inlet region where typical Red-tailed Hawks have been seen during the spring migration. Where overlapping does occur, as at the edges of the breeding ranges, careful study should be made of interspecific relations. In addition to regular observations of this hawk during the breeding season we have four nesting records for the area about Anchorage: May 4, 1959, two eggs; June, 1961, two eggs; July, 1961, two downy young; June, 1962, two eggs. A fifth nest, also containing two eggs was observed at Hidden Lake on the Kenai Peninsula on July 3, 1960. One pair was observed carrying nesting material on April 26, 1960, near Anchorage. The nests are placed far above the ground in tall trees, either spruce (*Picea*) or cottonwood (*Populus*). Data for a female collected at the nest in 1959 are: largest ovum 5 mm., incubation patch, moderate fat, weight 1273.4 gm. Data for two birds collected at Mile 20 on the Tok Cutoff road on October 1, 1957, are: female, ova minute, heavy fat, weight 1420.4 gm.; male, testis 8 mm., heavy fat, weight 1056.4 gm.

*Charadrius vociferus*. Killdeer. The Killdeer has been reported as a casual straggler to Alaska, most commonly observed in the extreme southeastern part of the state; only four records exist for interior and northern localities: Kuskokwim River, lower Yukon River, Brooks Range, and Point Barrow (Gabrielson and Lincoln, 1959:326). More recently, Kessel (1960:481) reported seeing two individuals near College, a suburb of Fairbanks. In the Cook Inlet region we have observed this species with fair regularity since 1955 and have at least indirect evidence of nesting. The Anchorage area records are as follows: May 9, 1955, one flying overhead, calling; May, 1958, three together on a lawn; May 27, 1959, one seen overhead, calling; May 28, 1959, one flying overhead calling at Potter Marsh; May 10, 1961, two on the marsh at the mouth of Chester Creek (Boottlegger's Cove) and observed to travel between the marsh and a nearby golf course; May 19, 1961, one seen overhead; May 20, 1961, one travelling between Chester Creek and the golf course; June 3, 1961, same as the last; May 2, 1962, two at the city cemetery; May 17, 1962, one flying between Chester Creek and the golf course; May 27, 1962, one calling overhead at night; June 10, 1962, six at the city cemetery; June 11, 1962, one alarmed bird on Chester Creek performed a distraction display indicating the probable presence of a nest nearby; and, June 13, 1962, eight at the city cemetery. Two observations have been made on the Kenai Peninsula: May 13, 1962, one on the marsh at the mouth of the Kenai River; and, six calling overhead seen by Steven R. Smith on the Homer Spit at Kachemak Bay. This number of observations could undoubtedly have been greatly increased had any special effort been made to locate birds of this species. The numbers of birds present in the vicinity of Anchorage, their occurrence through May and June, and the behavior of the displaying bird at Chester Creek, indicate to us that breeding occurs in the area. If so, this represents a substantial extension of the known breeding range northwestward from British Columbia (A.O.U. Check-list, 1957:170).

*Bartramia longicauda*. Upland Plover. The scattered records of this species in Alaska are for the central interior south to the vicinity of Mount McKinley in the Alaska Range, and two observers reported seeing it in the Copper River valley. Steven R. Smith has informed us that he saw several pairs on breeding territories 10 miles SSE of Nabesna, in the Wrangell Mountains, in late May, 1962. This extends the known breeding range well to the south of the Alaska Range. In addition, we have one specimen from Anchorage, collected on September 9, 1962: female, ova small, heavy fat, weight 169.0 gm.

*Limosa haemastica*. Hudsonian Godwit. The numerous records of this species in south-central

Alaska, as well as those from other parts of the state, including breeding records, have been summarized in a recent paper (Williamson and Smith, 1964). Another record, that of Hudson (1954: 51) who observed 25 of these birds on the mud flats near the mouth of the Beluga River on Cook Inlet in July of 1951, was unfortunately overlooked in the review paper. It appears that this species has a history of occurrence and breeding in Alaska which antedates the earliest observers in the region.

*Pagophila eburnea*. Ivory Gull. Alaskan records of this gull are almost entirely restricted to the arctic coast. Fay and Cade (1959:120) reported that Ivory Gulls are of uncommon but regular occurrence at St. Lawrence Island in the spring and fall. There are no records of this species to the south of the Pribilof Islands (Gabrielson and Lincoln, 1959:454). Our records, all for 1963, indicate a small influx of these gulls into the Cook Inlet region. On April 13, a single bird was observed near the base of Homer Spit; it was collected the following day. Another was observed on Potter Marsh on May 1.

*Zenaidura macroura*. Mourning Dove. There are numerous records of this species in south-eastern Alaska, where it probably breeds, but there are only two records from elsewhere in the state: Fort Yukon, 1916, and southwest of Fairbanks, at Clear, 1947 (Gabrielson and Lincoln, 1959:522). A third record from the interior was that of a bird seen on June 13, 1961, near Mile 126 on the Steese Highway north of Fairbanks (Weeden, 1961:27). On October 1, 1961, Margaret Heller, a resident of Anchorage, saw a Mourning Dove in downtown Anchorage and another, possibly the same individual, was seen in the city on October 17. On October 24 a single bird was seen in the town of Kenai by David L. Spencer of the United States Fish and Wildlife Service. The latest record was of a single bird in Anchorage, observed on June 17, 1962, by Laurence Irving of the University of Alaska. The several records for 1961 indicate at least a moderate influx of this species into south-central and interior Alaska during that year. A local guide reported to Williamson that he has heard Mourning Doves calling regularly in the spring in the vicinity of Chitina in the Copper River valley; that area may contain a small breeding population of this dove.

*Bubo virginianus wapacuthu*. Great Horned Owl. On July 7, 1959, a specimen of this owl, apparently just struck by an automobile, was found lying in the highway 30 miles northeast of Anchorage. This is the first record for Alaska of this strikingly colored subspecies whose nearest known breeding area is in the Mackenzie River valley (A.O.U. Check-list, 1957:277). Great Horned Owls occur commonly in south-central Alaska; around Cook Inlet we have found the breeding birds to be intermediate between the races *lagophonus* and *saturatus*. Data for the specimens mentioned above are: male, testis 8 mm., light fat, molting, weight 1290.7 gm.

*Aegolius acadicus acadicus*. Saw-whet Owl. On May 7, 1959, a Saw-whet Owl was heard calling in dense spruce-birch woodland on the outskirts of the city of Anchorage. An owl was heard again in the same locality on May 19 and was collected. On subsequent trips to this and other ecologically similar areas near Anchorage, no more of these owls were found. However, there is an earlier record for south-central Alaska, as well as several recent ones. During the winter of 1951-52, Robert L. Rausch of the Arctic Health Research Center, collected two Saw-whet Owls near Anchorage, but the specimens were not saved. Recent records from the Kenai Peninsula are as follows: a Saw-whet Owl captured near Hope was identified from a photograph made available to us; Francis H. Fay of the Arctic Health Research Center heard what was apparently a family group of these owls calling repeatedly during the evening of August 22, 1961, at Lake Emma in the Kenai Mountains; and, on November 18, 1963, a badly mangled Saw-whet Owl was picked up on a road in Homer. This owl was also reported as being present in the area about Iliamna Lake at the base of the Alaska Peninsula by residents of the village of Nondalton (Williamson and Peyton, 1962:38), a report made reasonable by the above records. This owl is apparently a regular but uncommon resident of southeastern Alaska where it has been recorded six times; apparently all but one of these were of single birds (Gabrielson and Lincoln, 1959:548). The Saw-whet Owl is evidently an uncommon breeding bird in the Cook Inlet region and quite likely also throughout the coastal region from southeastern Alaska to the Alaska Peninsula. Our specimen is close to typical *acadicus*, but when compared to a series from British Columbia, it was found to have heavier streaking on the crown, a decidedly less rufescent auricular region, and more sharply

defined and finer streaking in the postauricular area. Other data are: male, testis 8 mm., light fat, weight 73.0 gm. Data for the specimens collected by Rausch in 1952 are: January 26, female, weight 76.0 gm.; February 3, female, weight 64.1 gm.

*Selasphorus rufus*. Rufous Hummingbird. This species breeds along the coast of Alaska north to Prince William Sound (Gabrielson and Lincoln, 1959:556; Grinnell, 1910:392), and one previously has been reported at Tyonek, in Cook Inlet (Osgood, 1901:76). A single bird was seen at Elmendorf Air Force Base on August 16, 1961, and Rufous Hummingbirds of both sexes were observed by Boyd Shaffer at Ingraham Creek, near Portage, on Turnagain Arm during June and July, 1962. One of the males performed the noisy display flight characteristic of this species. It is quite likely that this hummingbird occurs regularly in small numbers in the coastal vegetation along the streams at the end of Turnagain Arm; this would extend the breeding range of this species into the Cook Inlet region.

*Colaptes cafer*. Red-shafted Flicker. An adult Red-shafted Flicker was seen at the airport at Seward on October 28, 1962. This is a characteristic species of southeastern Alaska, but there are no other records of birds north of the Lynn Canal (Gabrielson and Lincoln, 1959:564).

*Cyanocitta stelleri stelleri*. Steller Jay. This jay is a common inhabitant of the southeastern coastal forest north to Prince William Sound and less commonly along the southern border of the Kenai Peninsula to the shores of Kachemak Bay (Gabrielson and Lincoln, 1959:611-612). Robert L. Rausch obtained a specimen killed in east Anchorage in February of 1952 and collected two others, both first-year birds, 27 miles south of that city in September, 1955. A single bird was seen by Williamson on July 17, 1955, in dense hemlock forest near the end of Turnagain Arm. Search of this forest on several occasions over the past nine years has failed to reveal any of these jays, and the species was not seen again north of the known range for six years, until, in 1961, several of the birds were observed by Williamson: a single bird was seen on October 21, 1961, in a wooded residential area in Anchorage; a single bird was seen in the same area on November 11, and four were seen together on February 4, 1962. On May 3, 1962, one was heard calling from a backyard feeding station, and it was shortly joined by a second; the two fed quietly for several minutes, departing singly; the second followed the first into dense spruce-birch woodland. It was suspected at the time that they were nesting. On May 6, two first-year birds were again seen at the feeding station, and on May 13 a single bird was heard calling in the area. On July 20 an adult was observed feeding two well-grown fledglings, thus substantiating the suspected nesting. Data for the specimens are: February 16, 1952, male, weight 138.7 gm.; September 23, 1955, two females with small ova, no fat, and weights of 135.8 gm. and 143.3 gm.

*Sitta canadensis*. Red-breasted Nuthatch. With the exception of one record from the lower Copper River valley near Chitina, this species is known only from southeastern Alaska (Gabrielson and Lincoln, 1959:634-635). Mary A. Smith of Coho recorded Red-breasted Nuthatches from the vicinity of Anchorage in three consecutive years: May 10, August 16, 28, September 1, 1952; May 1, 2, 23, June 3, 9, August 14, 19, September 1, 1953; and July 13, 1954. Mairiis Kilcher of Homer observed this species commonly in that vicinity in 1954. In 1961 and 1962 this nuthatch was again observed in the vicinity of Anchorage: May 9, 21, 22, 1961; April 24, 1962; and on the Kenai Peninsula (Granite Creek), May 21, 1962. Breeding in the Anchorage area was indicated by the observation of two "pairs" in 1961 and one in 1962. Those seen in 1961 were investigating holes in dead birch stubs, but no follow-up check was possible. The observations indicate that this bird is a breeding summer resident in coastal forest north to the Kenai Peninsula and Cook Inlet, and that numbers vary widely from year to year.

*Turdus migratorius*. Robin. A Robin was seen on January 28, 1962, in the town of Seward where it appeared to be attached to a local feeding station. There are no winter records of Robins in Alaska except for the rare occurrence of members of the race *caurinus* in the southeastern area.

*Oenanthe oenanthe*. Wheatear. The Wheatear is known to breed in most of the mountain ranges of Alaska south to the Alaska Range and the Talkeetna Mountains; it also breeds in the Wrangell Mountains near Chitina (Gabrielson and Lincoln, 1959:668). On June 3, 1961, a male was observed and heard singing on the northwest slope of McHugh Peak (3300 feet) in the

Chugach Mountains, east of Anchorage. This bird behaved as if it were on a territory. On August 17 and 18, 1962, one and two birds, respectively, were seen moving over rock outcroppings at an elevation of 3500 feet on the north fork of Falls Creek, in the Kenai Mountains. It probably can be assumed that sparse breeding populations of Wheatears occur in both of these mountain ranges.

*Myadestes townsendi*. Townsend Solitaire. Alaskan records of this species are scant, and breeding has been reported only twice, near Circle on the Yukon River and on Igloo Creek in Mount McKinley National Park (Alaska Range), the westernmost record of the species. Records from near Chitina and Gulkana indicate a breeding population in the Wrangell Mountains (Gabrielson and Lincoln, 1959:674-675). On May 21, 1962, a singing male was found at timberline (2000 feet) at the headwaters of Eagle River in the Chugach Mountains, and Vincent Hoeman of Anchorage observed this species in the same mountains (McHugh Peak) during both May and June of 1962. It appears likely that this species breeds in the Chugach Mountains and should also be looked for in the Kenai Mountains.

*Sturnus vulgaris*. Starling. Alaskan records of this species are few, but they indicate a steadily increasing number of birds. One was seen at Juneau on April 17, 1952 (Gabrielson and Lincoln, 1959:830), one near Fairbanks on May 4, 1960 (Kessel, 1960:482), and one seen flying between Elmendorf Air Force Base and Anchorage on October 8, 1960, by Robert L. Rausch; three were seen together on September 2, 1962, at Fort Yukon (Yocom, 1963:544). Our record is of a single bird seen perched on a telephone wire at Seward on November 13, 1962. This bird, like those seen by Kessel and Yocom, was wary and did not permit a close approach. Stewart (1964:78) found a maximum of 53 at Petersburg in March, 1963, and later the same year found nine nests. Considering the general scarcity of observers it seems that the Starling must occur rather commonly in Alaska, and it may be only a matter of time before the general establishment of breeding birds.

*Euphagus carolinus*. Rusty Blackbird. The Rusty Blackbird is a common breeding species in south-central Alaska arriving in the Anchorage area as early as April and remaining into September. There are scattered records of birds wintering in southeastern Alaska, and we can add to this several records of this species in winter as far north as Cook Inlet. These observations for 1962 are: November 24, 12 birds foraging beside Ship Creek; December 19, two seen in downtown Anchorage; December 30, three different individuals seen by James E. Hemming of the Arctic Health Research Center at Potter Marsh feeding beside small open trickles in an alder thicket; 1963, March 13, a single male heard and seen singing at Potter Marsh; and December 22, seven seen near Anchorage during a census by members of the Alaska Ornithological Society. There has been a recent succession of mild winters in the Cook Inlet region which may well have prompted these birds to overwinter. They prefer to forage where there is open water, and this would appear to be a necessary prerequisite for finding food in winter.

*Junco hyemalis*. Slate-colored Junco. Slate-colored Juncos were seen in winter on Kodiak Island on two occasions in 1943, and once in 1944 (Gabrielson and Lincoln, 1959:782). Otherwise, there are no winter records of this common breeding species north of extreme southeastern Alaska where there have been perhaps 50 sightings over a 20-year period. A single bird was seen on February 12, 1961, at Bird Creek on Turnagain Arm south of Anchorage, and small numbers were present all during the winter of 1961-1962 in that city. Two and one were seen in the city on March 24, and December 22, 1963, respectively. At Seward, four were seen on December 22, 1962, and, during 1963, 20 were seen on February 3, and 29 on December 21. These records indicate overwintering in south-central Alaska for four consecutive years, prompting us to consider this species an uncommon but regular winter resident.

*Junco oreganus*. Oregon Junco. Our observations of this species at Seward, one male on December 22, 1962, and two males on February 3, 1963, indicate a northerly post-breeding dispersal from the nearest known nesting area at Yakutat, as well as a new overwintering record (Gabrielson and Lincoln, 1959:784-785).

*Spizella arborea*. Tree Sparrow. There appear to be only three winter records of this species in Alaska, two in November and one in January, all in the southeastern part of the state (Gabrielson and Lincoln, 1959:787). We have three records for Seward as follows: one seen foraging on a

lawn on January 28, 1962; four seen along a brushy roadside on December 22, 1962; and two seen on February 3, 1963. In addition, five were seen on a snow-free hillside at Homer on February 2, 1963.

*Zonotrichia leucophrys*. White-crowned Sparrow. This common breeding species is strongly migratory and there appear to be no winter records north of the normal winter range (southern Canada and south). Small numbers overwintered in the vicinity of Anchorage for three consecutive years, 1960-1963. A minimum of five were present at a feeding station eight miles south of Anchorage during the winter of 1960-61, and at least two were in the same area the following winter. A single bird was seen throughout the winter of 1962-63 at a feeding station in the city. Apparently these overwintering birds are not necessarily dependent on feeding stations, as a total of 18 were seen during a winter census of the Alaska Ornithological Society in a wooded area near Anchorage on January 2, 1961. This species should be considered an uncommon winter resident of south-central Alaska.

*Zonotrichia atricapilla*. Golden-crowned Sparrow. On December 22, 1962, a single immature Golden-crowned Sparrow was seen along a roadside at Seward. This is the first winter record of this species for Alaska, and there are apparently no other records north of the normal winter range.

#### LITERATURE CITED

American Ornithologists' Union

1957. Check-list of North American birds. Fifth ed. (published by the Union, Baltimore, Md.)

Chapman, F. M.

1902. List of birds collected in Alaska by the Andrew J. Stone expedition of 1901. *Bull. Amer. Mus. Nat. Hist.*, 16:231-247.

1904. List of birds collected in Alaska by the Andrew J. Stone expedition of 1903. *Bull. Amer. Mus. Nat. Hist.*, 20:399-406.

Fay, F. H., and Cade, T. J.

1959. An ecological analysis of the avifauna of St. Lawrence Island, Alaska. *Univ. Calif. Publ. Zool.*, 63:73-150.

Figgins, J. D.

1904. Field notes on the birds and mammals of the Cook's Inlet region of Alaska. *Abstract Proc. Linn. Soc. N. Y.*, Nos. 15-16:15-39.

Gabrielson, I. N.

1944. Some Alaskan notes. *Auk*, 61:105-130; 270-287.

Gabrielson, I. N., and Lincoln, F. C.

1959. The birds of Alaska (Wildl. Manag. Inst., Wash., D. C.).

Grinnell, J.

1910. Birds of the 1908 Alexander Alaska expedition with a note on the avifaunal relationships of the Prince William Sound District. *Univ. Calif. Publ. Zool.*, 5:361-428.

Hudson, G. E.

1954. Hudsonian godwits on Cook Inlet, Alaska. *Murrelet*, 35:51.

Kessel, B.

1960. Additional distribution records of some birds in interior Alaska. *Condor*, 62:481-483.

Osgood, W. H.

1901. Natural history of the Cook Inlet Region, Alaska. *N. Amer. Fauna No.* 21:51-81.

Rosenau, D.

1961. A new record of great blue heron for Cook Inlet. *Bull. Alaska Ornith. Soc.*, 1:26-27 (mimeographed).

Stewart, P. A.

1964. Bird notes from southeastern Alaska. *Condor*, 66:78-79.

Weeden, R. B.

1961. A mourning dove visits interior Alaska. *Bull. Alaska Ornith. Soc.*, 1:27 (mimeographed).

Williamson, F. S. L., and Peyton, L. J.

1962. Faunal relationships of birds in the Iliamna Lake area, Alaska. Biol. Pap. Univ. Alaska, No. 5:iv + 1-73.

Williamson, F. S. L., and Smith, M. A.

1964. The distribution and breeding status of the Hudsonian godwit in Alaska. Condor, 66: 41-50.

Yocom, C. F.

1963. Starlings above the arctic circle in Alaska, 1962. Auk, 80:544.

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