

THE WINTER BIRDS OF ADAK, ALASKA

By RICHARD D. TABER

Adak, one of the Aleutian Islands, is situated about two-thirds of the way westward along the chain which these islands form. It is roughly 30 miles long by 20 wide, but of an extremely irregular shape, with many fjords, bays and lagoons; the highest peak, Mount Moffett, is situated at the northern end of the island and is 3900 feet in elevation. The island seems wholly volcanic in origin, with bare rock on the higher ridges. The lower parts are rolling, with a low, dense tundra growth and many ponds. There are no trees and the tallest growth is the strand wheat along the shore, which forms dense mats when dead. The winter weather is not extremely cold, the temperature seldom falling below zero, but it is extremely changeable and the sudden wind, or williwaw, sometimes blows more than 80 miles an hour.

In early times, to judge by the remains in the shell-ridges, the island supported a considerable population of aboriginal Aleuts. The general process of race decline, which has operated throughout the Aleutians since the days of Russian exploration, has, however, caused the natives to desert vast stretches of their original territory and Adak

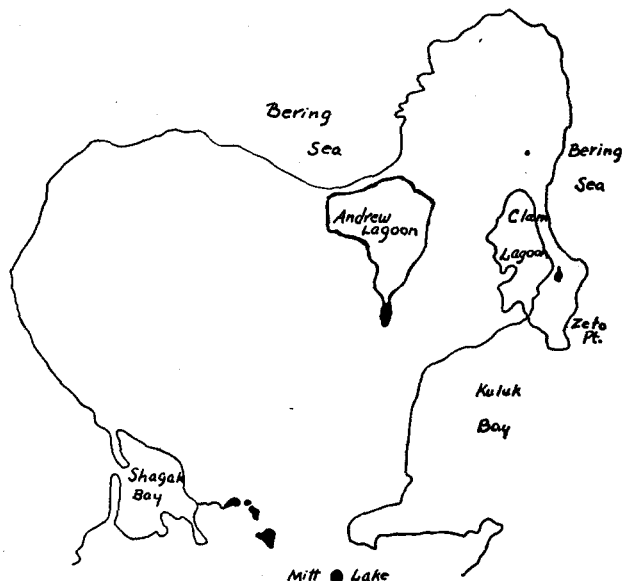


Fig. 63. Map of north end of Adak Island, Alaska.

was apparently so abandoned. For some time before the war, the total population, to the best of my knowledge, consisted of a single fox trapper; the little blue foxes of that day are still occasionally seen but their numbers have been kept down by the poaching of service personnel.

The literature concerning the bird life of the Aleutians is extremely scanty, especially with reference to winter. Turner spent considerable time on Attu; his report (*Contr. Nat. Hist. Alaska, Signal Service, U. S. Army, Washington, D.C.*) remains as the best source of information, even though it was published in 1886. The dearth of winter observations is not surprising when it is remembered that in Aleutian waters winter travel was almost non-existent before the war.

During the war, of course, there has been a great deal of traffic over and among

these islands, but I believe the long-range effects upon the bird population to have been small. The spread of blue foxes might well be of greater consequence than the location of occasional military bases.

Since certain islands, including Adak, are to be manned permanently by military personnel, it seems likely that more copious observations on natural history will be forthcoming. It is with this in mind that certain information is now offered which may afford a basis for comparisons in the future.

From November 18, 1945, to January 20, 1946, about 25 days were spent in observing the bird life of the northern tip of the island (fig. 63). Habitats involved were sandy and cobbled ocean beaches, offshore rocks, a sheltered salt lagoon (Clam Lagoon), a large fresh-water lake (Andrew Lagoon) without marshy banks, and areas of grassy strand, marsh and tundra. Although practically all the small upland ponds froze over early in the period of observation, the surface of Andrew Lagoon was only about one-third frozen by January 20, and Clam Lagoon remained unfrozen. It is thought that both lagoons may freeze solid later in the year and so be unavailable to water birds.

Colymbus grisegena. Red-necked Grebe. One flock of about 50 appeared on November 25, whereas only 12 had been noted previously. These then disappeared, except for a few stragglers; again, about December 16, another group of the same size appeared and was gone by December 25. Thereafter only two singles and a pair were seen. These grebes were rarely noted on the salt lagoon; they preferred the open waters of the Bering Sea, diving actively near shore.

Colymbus auritus. Horned Grebe. These grebes were present in small numbers on salt lagoons throughout the period of observation. On November 22, 4 were seen on Clam Lagoon and on January 9, 3 were seen on Shagak Bay. The birds stayed well out from shore whenever they saw the observer; this and their small size made observation difficult. Turner (*op. cit.*: 115) did not find this bird west of Unalaska. He states that it prefers fresh water "and only resorts to the bays and estuaries when the fresh water is frozen." This was not true on Adak where these birds were observed on the salt lagoon during a period when there was plenty of open fresh water available. They were never, in fact, seen on fresh water.

Phalacrocorax pelagicus. Pelagic Cormorant. *Phalacrocorax urile*. Red-faced Cormorant. These two cormorants were present continually, both on the open sea and the sheltered lagoon, but never on fresh water. No attempt was made to census them.

Philacte canagica. Emperor Goose. These birds preferred the salt lagoons, a flock of 204 frequenting Shagak Bay and one of 176 stayed at Clam Lagoon. They fed on the shores and sand-bars, sometimes working up into the tall grass of the hillsides. In addition to these large flocks, certain small groups remained separate, for example one of 3 adults and 5 immatures and another of 2 adults and 3 immatures on Clam Lagoon and one of 4 adults in Kuluk Bay (Bering Sea). Small numbers were occasionally noted on the fresh water of Andrew Lagoon; the largest flock noted there consisted of 16 adults and 3 immatures and was seen during a blizzard on January 20. Turner characterizes this bird as a wary frequenter of exposed rocks, but near Clam Lagoon, especially in stormy weather, they could be closely approached by car; occasionally I had to stop to let a procession waddle across the road. Although they are still shy of a man afoot, it would seem that continued protection from poaching will render them increasingly tame.

Anas platyrhynchos. Mallard. A few scattered birds frequented low-lying ponds early in the winter but when those froze over on December 11, 1945, they concentrated, not on the unfrozen fresh-water lake, but near a swampy portion of the salt lagoon. Later a male was seen on the lake, and a female, pursued by a shrike, was observed to light in a small stream. But the concentration of this species was on Clam Lagoon, where, on January 12, 1946, there were 11 males and 5 females.

Anas acuta. Pintail. Except for one female noted on a small, partially-frozen pond (Mitt Lake) on January 1, 1946, the whole Pintail population frequented Clam Lagoon; it consisted of a flock of 48. According to Clark, Collins and Walker (*The Aleutian Islands, etc.*, Smithsonian Inst. War-Background Studies No. 21, 1945), this bird had not been thought to winter in the Aleutians. My observation led me to believe that Pintails would leave Adak only if the salt lagoons froze over.

Anas crecca. European Teal. A flock of 47 was present on Clam Lagoon all through the period of observation, with an apparently equal division of sexes, although the birds were too flighty for accurate differentiation. On December 16, one was seen with a raft of Greater Scaup Ducks on Andrew Lagoon, the only record on fresh water.

Chaulelasmus streperus. Gadwall. Like the Mallards, the Gadwalls were present all during the winter and frequented fresh-water ponds until they froze. They then took to the salt lagoon, never being seen on the lake. The flock consisted of 5 males and 4 females. Turner mentions these birds as being frequently associated with Pintails. On Adak they were rarely seen together, and then only when scattered while feeding. Ordinarily they rafted quite apart from each other.

Nyroca marila. Greater Scaup Duck. Up until January 19, 1945, a total of 135 scaups was present on Andrew Lagoon; after that date Andrew Lagoon was partly frozen and about 45 birds moved to Clam Lagoon. The total population consisted of 66 males and 69 females; 22 of the males were immature. On December 4, a mature male was found dead on the west shore of Andrew Lagoon. The breast was bare of feathers for an area of two square inches on the midline just posterior to the black feathers of the fore-breast. A thorough macroscopic examination revealed two massive tapeworm infestations as the probable cause of death. The bird, although not fat, was apparently in good condition otherwise and it is considered probable that the parasites lowered its vitality sufficiently to permit it to freeze to death; the gizzard was full of aquatic weeds and the intestines contained partly digested matter.

Glaucionetta clangula. Common Golden-eye. One to three birds occasionally were seen on Andrew Lagoon (fresh) or the calmer waters of the Bering Sea, near shore, but the main flock was present on Clam Lagoon (salt) throughout the period of study.

Charitonetta albeola. Buffle-head Duck. Except for one associated with a raft of Greater Scaup on Andrew Lagoon (November 21, 1945), these birds were observed only on the salt lagoon, usually in groups of from 2 to 8. When both sexes were present, the numbers were about equal; the birds were often seen in pairs, but small groups of what appeared to be females and young were also seen. The birds were present in stable numbers all through the period of study and on January 13 an analysis of the population gave: 12 pairs plus two groups of 1 female and 3 immatures, totalling 32 birds.

Clangula hyemalis. Old-squaw Duck. These birds were present both on Clam Lagoon and on the Bering Sea, near shore, all through the winter, but their restlessness precluded gathering of accurate sex-proportion data. They were on the go continually, either diving, chasing one another, or flying erratically from place to place. Up until December 9, 1945, the Clam Lagoon population was about 14; on that date over 75 birds appeared on the lagoon, but they were not seen subsequently. The residual population gradually increased to about 25 on December 31, 1945, and was down to about 10 on January 13, 1946. A few observations suggest that the males are more likely to frequent the open sea than the females, which are often found on the sheltered lagoon.

Histrionicus histrionicus. Harlequin Duck. These birds were common, frequenting the breakers and rocks of the Bering Sea and the shore of Clam Lagoon. The number in a flock ordinarily ranged from 2 to 20; 70 once were seen together. The immature male differs from the adult in having no white back markings nor red side patches. The sex ratios differed significantly between the Bering Sea and Clam Lagoon, and this difference was obvious all through winter; the males were preponderant in the open sea and the females in the lagoon.

Somateria mollissima v-nigra. Pacific Eider. Although the easily recognized adult males offered no problem, considerable difficulty was experienced in differentiating between the females of this and those of other kinds of eiders and between adult and immature females. No adequate reference works were available, and notes taken on the spot indicate that the adult female has a more richly brown head than described in Kortright (Ducks, Geese, Swans North America, 1942) or than observed in the museum specimens available. Assuming that this is so, 8 males and 11 females used Clam Lagoon and the stretch of the Bering Sea under observation all through the study; they were never all together, but usually appeared in groups of 4 to 6. On Clam Lagoon they either loafed or splashed energetically, causing a considerable commotion, while at sea they fed about the offshore rocks. On December 23, 1945, a tight raft of 36 was sighted for the first time on the Bering Sea, near shore. It consisted of 23 males and 13 females and was not seen subsequently. Lumping the "residents" and "transients" yields totals of 31 males and 24 females. There thus is support for Turner's statement that the males are more numerous than the females at all seasons.

Polysticta stelleri. Steller Eider. A single male was first observed feeding with a flock of Harlequin Ducks around offshore rocks in the Bering Sea on December 23. Subsequently, a single male, presumably the same one, was noted on Clam Lagoon on January 4, 1946, still associated with Harlequins.

Melanitta fusca. White-winged Scoter. Nine or ten birds were present on Clam Lagoon from December 9 to December 23, 1945, when 32 were seen. These apparently moved on, for only one was observed on January 13, 1946, and none thereafter.

Melanitta perspicillata. Surf Scoter. A single male, associated with Black and White-winged scoters, was seen on Clam Lagoon on December 14, 16, and 23, 1945.

Oidemia nigra. Black Scoter. This was the most common bird of the area; it was seen in groups

of 2 to 70 on the salt lagoon and the open sea. On the lagoon a marked dichotomy of behavior was noted; the small groups loafing or feeding desultorily near shore were preponderantly males whereas the tight rafts feeding energetically on small fish and shell-fish in the channel and over the sandbanks of the lagoon's mouth were preponderantly females. Turner states: "They are not gregarious, rarely more than three or four together, and often only solitary." This was certainly not true on Adak, where groups of a dozen were seen commonly and one dense raft of 70 was noted.

Mergus serrator. Red-breasted Merganser. Never seen on the open sea and only occasionally on fresh water. These birds congregated beside the swift current near the mouth of Clam Lagoon. There they swam with outstretched necks and heads immersed, diving frequently. The first flock observed on December 9, 1945, consisted of 1 male and 18 females and immatures, and the last flock closely observed on January 13, 1946, contained 13 males and 35 females and immatures.

Haliaeetus leucocephalus. Bald Eagle. Present through the winter. Adults were often noted sitting on the tundra-covered offshore rocks. Adults and immatures apparently secured much of their food from the garbage dumps. On November 19, 1945, three immatures and one adult were harassing a number of gulls clustered about some floating garbage. When the gulls had dispersed, one immature glided slowly to the surface and tried without success to grasp a floating piece in its talons.

Falco columbarius. Pigeon Hawk. On December 9, 1945, a single individual was observed for over half an hour as it flew or perched on various wires. The characteristic broad tail-bands were plainly seen. This appears to be the first record west of Unalaska.

Falco peregrinus. Duck Hawk. Single birds, apparently two different individuals, were seen on November 25 and December 16, 1945, and January 13 and 27, 1946. The lighter colored bird noted on the first two dates was seen to stoop twice unsuccessfully at a male Pacific Eider. The eider, which was squatting on a rock in Clam Lagoon, simply crouched lower when the hawk stooped and the stoop was checked ten or fifteen feet above the bird's back. The second, darker individual was also seen in the vicinity of Clam Lagoon, speeding low over the water, but close observation was impossible.

Haematopus bachmanii. Black Oyster-catcher. Only two observations, apparently of the same individual, were made: December 23 and 31, 1945. Both times the bird was in flight along the cobbled shore of the Bering Sea, near Clam Lagoon. It was strangely rare for a reputedly common bird.

Erolia pilocnemis. Rock Sandpiper. Scattered pairs of remarkably tame birds frequented the tundra hillsides around Sweeper's Cove (Naval Base) until about the first of November. Whether they then left the island or changed to a seashore habitat in some other part of the island I do not know, but they were not seen thereafter.

Erolia alpina. Red-backed Sandpiper. First noted on December 30, 1945, when a pair was feeding along the rocky shore of Clam Lagoon. Subsequently, on January 6, 1946, 4 were noted at the roadside on Zeto Point, sheltering themselves from a full gale in small irregularities of the ground; all the while they moved about actively. On January 9, 1946, 4 were seen feeding on the rocks bordering Shagak Bay, on the opposite side of the island. The last observation was of two birds, on January 20, 1946, on Clam Lagoon. Turner did not think that this species occurred out on the Aleutian chain and Clark mentions it as occurring only on Unimak.

Larus hyperboreus. Glaucous Gull. Birds appearing both white (second-year) and buffy (first-year), were occasionally noted among the vastly greater numbers of Glaucous-winged and Herring gulls. The bills were yellow with black tips, facilitating identification.

Larus glaucescens. Glaucous-winged Gull. Several hundred of these gulls were observed regularly, loafing on Andrew Lagoon. They also congregated around the garbage dump, and another source of food was indicated, when, on Clam Lagoon, one dove heavily on an emerging Harlequin and bluffed it into dropping its mouthful. Scattered gulls loitered around feeding Harlequins, Buffle-heads and scoters, robbing them just seldom enough to keep them from being frightened away.

Larus argentatus. Herring Gull. These gulls apparently preferred salt water to fresh water, and numbers of them were commonly seen feeding in the surf. One such group consisted of 6 adults and 10 immatures. However, the birds considered adult were dark-headed, and probably were in fact subadult.

Larus canus. Mew Gull. On January 12, 1946, 4 individuals, 2 adults and 2 immatures, were seen harassing a group of Buffle-heads on Clam Lagoon. One adult pursued a male Buffle-head through the air on a circumscribed course for fully three minutes, without forcing it to drop its food, but generally their efforts were more successful.

Rissa tridactyla. Black-legged Kittiwake. On November 18, 1945, a single immature bird was seen flying near Gannet Rocks. The bill was light yellow-green, the feet and wing-tips black and there were irregular dark markings behind and below the eye. It was not seen subsequently.

Corvus corax. Holarctic Raven. These birds are common around the military installations, especially where there is garbage to be stolen. They become bold in this pursuit, even entering the open door of a garbage shed, but, while bold, they are also cautious, and although many men and dogs

attempted to capture ravens, none was ever taken. These birds are great acrobats. One was observed hanging upside down from a fence wire, apparently playing, for it flapped briskly off afterward. My notes of November 21, 1945, are quoted: "When the car approached, a raven which had been standing on the tundra, rose in alarm. A chunk of moss adhered to one foot. The raven remained soaring in the immediate neighborhood, engrossed in freeing itself from the moss. First, it picked a piece out with its beak. Then it gave a croak . . . and another raven approached and tried to snatch the moss away, apparently with its feet. No go. Shortly thereafter the moss came loose and both flew off together."

Troglodytes troglodytes. Winter Wren. On January 6 and 13, one and three individuals, respectively, were seen in the rank matted strand wheat between Andrew Lagoon and the sea. These birds are very secretive and were not easily observed.

Lanius excubitor. Boreal Shrike. On January 9, 1946, a female Mallard was seen flying along a small stream near Shagak Bay; a shrike struck at her back twice as she flew. The Mallard lit in the water and the shrike hovered characteristically over her for a moment and then lit on a barbed-wire fence. The ground was snow covered at this time, leading to the supposition that this shrike was extremely hard pressed for food.

Leucosticte tephrocotis. Rosy Finch. These birds were present throughout the winter, feeding on the heads of composites which projected above the snow. Even after the heaviest snowstorms, some dry vegetation always seemed to be exposed. The Rosy Finch flocks varied from 6 to about 30 individuals.

Acanthis, sp. Redpoll. On December 16, 1945, a single individual was seen feeding near a flock of Rosy Finches. What was apparently the same individual was observed at the same spot, above the shore of Andrew Lagoon, on December 30, 1945.

Melospiza melodia. Song Sparrow. These sparrows were present throughout my stay. In the early winter they ranged up the hillsides a considerable distance from the shore, but as the snowline crept down, they became more restricted until finally they were found almost entirely along the shore in the driftwood and rank matted grasses.

Plectrophenax nivalis. Snow Bunting. These conspicuous birds were first observed on January 19, 1946, when 3 were noted. Their arrival coincided with a rather severe storm. On the following day, a flock of 24 was closely observed; it consisted of 13 males and 11 females.

Table 1

Summary of sex ratios

Species	Total	Total	Ratio	Species	Total	Total	Ratio
	♂ ♂	♀ ♀	♂ ♂ : ♀ ♀		♂ ♂	♀ ♀	♂ ♂ : ♀ ♀
Mallard	11	5	220:100	Buffle-head Duck	12	14	86:100
Pintail	28	16	175:100	Pacific Eider	31	24	129:100
European Teal	23	24	96:100	White-winged Scoter	33	15	220:100
Greater Scaup Duck	62	69	90:100	Black Scoter	91	70	130:100
Harlequin Duck	21	11	190:100	Red-breasted			
			(Bering Sea)	Merganser	29	109	27:100
	28	28	100:100	Snow Bunting	13	11	118:100
			(Clam L.)				

COMPARISON OF WINTER AVIFAUNAS OF ADAK AND ATTU ISLANDS

The winter avifauna of Attu Island has recently been described by Sutton and Wilson (Condor, 48, 1946:83-91). In comparing the two avifaunas, it should be borne in mind that observations were made during slightly different periods of the year; the Attu study extended from February 20 to March 18, 1945, while on Adak the comparable period was November 18, 1945, to January 20, 1946.

The climate and topography of Attu appear to be similar to those of Adak, except that the Adak weather during the period covered, while extremely changeable and often tempestuous, was not as stormy as that of Attu, nor did snow drift in the lower altitudes so thickly as to cover all natural terrestrial sources of food. Many patches of plant growth were exposed by wind on the ridge-tops, projected through the snow in shallow drifts or were kept free of snow by the action of wave and tide. Whereas a large proportion of the Adak observations were made either on a large fresh-water lake or on one

of two calm lagoons, neither of these habitats was represented in the Attu area. Correspondingly, those birds which seemed largely restricted to the lagoon habitat, especially, were not noted on Attu. These include the following species: Mallard, Gadwall, Pintail, Bufflehead and Red-breasted Merganser. The European Teal, of which only one was observed, might also be included. All these were observed to favor calm water, even to the extent of leaving their favorite feeding and loafing areas when those occasionally became too rough. It is thought that in the fall these birds use the numerous small open ponds on islands throughout the chain and that when these ponds freeze in early winter the majority migrates southward and stragglers congregate in certain rather rare and favorable spots, such as the calm and marshy-shored lagoons. Thus it seems possible that if such areas are to be found in the western-most islands, these birds might be discovered to winter on them.

Since Adak is situated between Attu and the Alaska Peninsula, it is to be expected that certain stragglers from the mainland will be found in the former only. The Pigeon Hawk and the Boreal Shrike are in this category. Other primarily mainland forms like the Bald Eagle, the Red-backed Sandpiper, the White-winged and Surf scoters, the Red-necked and Horned grebes, and the Mew Gull are thought to diminish in numbers westwardly. Of these, only the White-winged Scoter was observed on Attu, and this was a single individual.

Certain other birds are only rarely observed and might be missed in one locality or the other. These include the Steller Eider and the Black Oyster-catcher, which were observed on Adak but not on Attu, and the Gray Sea Eagle, which was noted only on Attu.

The Northern Murre and the Ancient Murrelet were observed only on Attu, but the steep and rocky western shores of Adak, where the Alcids are said to be found, were not covered in my study.

From the foregoing it seems evident that the winter avifaunas of both Adak and Attu stem from the mainland of Alaska; there is no group of primarily Asiatic forms at this season. There are, however, real differences between the avifaunas, and these may be explained on ecologic and geographic grounds.

San Francisco, California, April 17, 1946.