

THE SUMMER BIRD LIFE OF ATTU

By ROWLAND STEELE WILSON

In a paper by Sutton and myself (1946) I already have published most of my observations on the winter bird life of Attu Island, in the Aleutian Chain, but I have not reported on the summer birds. Since I was stationed on the island for more than a year (September, 1944, to October, 1945), I experienced one full summer there from beginning to end. I could not get into the field much in this period, but I was so situated as to be able to reach certain stretches of ocean shore without trouble and to visit the great rocks at the tip of Murder Point, the several small tundra ponds west of Casco Cove, the broad valleys of small streams which flowed into Massacre Bay, the cliffs which rose abruptly from the sea along a stretch of shore northwest of Alexai Point, and the broad, dark beach at Alexai Point itself (see Sutton and Wilson, 1946:84, map). Visiting more distant points, such as Temnac Bay, Temnac River, and Alexai Pass necessitated cross-country hikes. Holtz Bay, Red Beach, Chichagoff Harbor, Fishhook Ridge, and other places along the north shore I visited infrequently in connection with Navy assignments.

Attu is young, geologically speaking. Unlike certain other islands of the Chain it has no active volcano. Raised beaches, which have resulted from comparatively recent up-thrusts of the land-mass, are to be seen one-quarter of a mile inland in Temnac Valley on the south shore, and at Steller's Cove on the north shore. Beaches at the seaward end of the long valleys are usually of dun-colored sand; the sand of Temnac Beach, however, is basaltic and black. Along almost the entire coast steep mountains rise abruptly a short way back from shore, some of them attaining a height of 3500 feet. The peaks and narrow, knife-sharp ridges are rugged and usually bare. The most extensive stretch of level terrain is at the island's east end. Here even the highest ridges do not rise to much over 2500 feet, and four broad valley systems fan out to the north, east and south from the central area of Jarmin Pass (between Massacre Bay and Holtz Bay) and Clevesy Pass (between Massacre Bay and the Chichagoff-Sarana Bay Sector). Swift streams flush these valleys, pouring into and draining freshwater lakes within half a mile of the sea.

The fall of 1944 was almost continuously overcast. Rifts in the clouds occasionally permitted the sun to break through, but only about once in a fortnight did we have a day which was bright from sunrise to sunset. Early in September the temperature began to go down. By September 12 snow lightly covered the mountain peaks and higher ridges. The snowline marched steadily down the slopes until, by December 10, there was a substantial blanket over the lowlands. Eventually this reached a depth of five feet half a mile back from the coast of Massacre Bay, and of more than thirty feet in valleys a mile inland. The outer beaches were so lashed by the wind, however, that the snow rarely attained a depth of more than a few inches there, and tall dead grass which stuck up in rough clumps almost at the waters' edge (when the tide was in) did not become flattened and snow-buried until midwinter. These clumps of grass continued to be the only places, aside from openings under rocks, in which such birds as Song Sparrows could find shelter.

After the raw, windy, and a stormy winter, clear days did not become more frequent as the season advanced. Indeed, they were less frequent in April and May than they had been in December and January. As the temperature rose and the days grew longer, the overcast became more and more persistent. When the chirps of the newly arrived Lapland Longspurs announced the winter's passing, horizon and contour lines had all but disappeared in the heavy fog and drizzle.

The spring breakup came about April 20. With incredible swiftness the snow disappeared from the lowlands, as an intricate network of rivulets and hundreds of tiny

shallow ponds came into being all over the tundra. Scarcely had the ground become brown when it turned green with upspringing grasses. Gayest of all were the lush emerald mats of wild rye (*Elymus arenarius*) which marked the upper limits of the beaches and the lichens (*Calloplaca elegans*) which spotted the rocks with bright red-orange. As the lower slopes became wholly free of snow, their brown tones brightened, and the edges of the rocks lost their sharpness as tiny filaments of moss lifted and spread.

On May 2 I found the first flower of spring—a reddish purple blossom of the crowberry (*Empetrum nigrum*). But the height of the flowering season came in July and August. In August we had stretches of fine weather. More sun appeared. The cloud cover thinned and temperatures averaged 52° F., with the thermometer sometimes up to 70° F.

In August and early September fruit matured on the Siberian mountain ash (*Sorbus sambucifolia*), crowberry, dwarf dogwoods (*Cornus canadensis* and *C. suecica*), bilberry (*Vaccinium uliginosum*), and cranberry (*Vaccinium vitisidaea*). Many of these fruits were important bird foods. By September 12, when snow again whitened the peaks, the flowers all were gone and brownness had returned to the tundra.

The following list of birds probably includes most of the species which breed on Attu, as well as a few, such as *Philacte canagica*, which winter there but do not nest. Certain species, such as *Uria lomvia* and *Synthliboramphus antiquus*, which probably breed on or near Attu, were not seen with certainty. Two species, *Diomedea nigripes* and *Oceanodroma leucorhoa*, I saw only in the Bering Sea north of the Aleutian Chain and east of Attu.

For the names of plants in the following list I am indebted to George B. Van Schaack.

Diomedea nigripes. Black-footed Albatross. On an eastbound voyage north of the Aleutian Chain I saw the Black-footed Albatross almost constantly from September 30 to October 2, 1945, inclusive. On those three days from five to forty birds followed our vessel throughout the daylight hours, and perhaps at night also, snatching ship's refuse from our wake. The species first appeared at a point north of Amchitka Island (179° W, 54° N) and was last seen at Unimak Pass (163° 30' W, 55° N). I did not see the species anywhere beyond Unimak Pass, in the North Pacific, or in Shelikoff Straits north of Kodiak Island.

Oceanodroma leucorhoa. Leach Petrel. On an eastbound voyage north of the Aleutian Chain I saw this petrel almost constantly from September 30 to October 2, 1945, inclusive. With the Black-footed Albatross, it first appeared at a point north of Amchitka Island, and I saw it as far east as Unimak Pass. I never saw more than ten birds at one time, nor fewer than five. They kept closer to the water than the Black-footed Albatrosses as they glided above the waves.

Phalacrocorax pelagicus. Pelagic Cormorant. I saw this species almost daily throughout the summer, especially in Casco Cove and Massacre Bay. So far as I could determine, its favorite feeding- and resting-grounds were the very ones which it had used all winter long (Sutton and Wilson, 1946:85-86). Often I saw a considerable company standing quietly, or preening in leisurely fashion, on low-lying rocks offshore. Single birds, pairs, or small companies fished regularly in deeper waters near the piers and breakwaters.

A sizeable colony bred on a huge, bold-faced rock which towered 70 feet above the sea on the island's north shore 200 yards east of Red Beach and just to the west of Holtz Bay. When I visited this colony on August 5, I counted 55 adult birds on the rock's south, southeast and west faces and saw many more flying along the north face. The birds clamped their tails tightly against the rock for support when perching in small niches or on narrow ledges. In several nests I saw young birds which appeared to be about half grown.

Philacte canagica. Emperor Goose. This goose is a familiar bird along certain stretches of shore in winter, but it does not summer on or about the island. I saw a newly arrived flock of 20 birds at Red Beach, west of Holtz Bay (on the north shore), December 2, 1944. At Massacre Bay, on the south shore, the species arrived *en masse* on December 20. From that date on I saw flocks numbering from 4 or 5 to 30 birds almost daily throughout the winter, from Alexai Point westward along the entire Massacre Bay shore as far as Murder Point. Often the flocks fed within 50 yards of the much travelled beach-

road, making their way from feeding ground to feeding ground in short flights during which they rarely rose more than a hundred feet in the air. After April 1 the flocks became smaller and the birds tended to frequent the rocks offshore rather than the beach proper, but I noted nothing which I considered courtship or pairing. On April 20 I watched a flock of 12 fly westward past Murder Point and Temnac Point to rocks about a hundred yards offshore in Temnac Bay. Here they tarried and fed; none was seen thereafter.

Anas platyrhynchos. Mallard. I frequently observed this species in the summer, principally in the valley of the Temnac River, along the shore of Massacre Bay, and in Holtz Bay. I first saw it on May 10, in the vicinity of Temnac Bay. Some of the 20 birds (12 males, 8 females) that day obviously were paired, but groups each composed of three or four males and one female idled in the salt water near shore, or made their way up the Temnac River to shallow marshes or tundra ponds. The Temnac valley must have been a favorite nesting ground of the species, though I failed to discover a nest or brood of young there. Characteristic plants of the valley were the tundra sedges *Deschampsia berigensis* and *Tofieldia coccinea*, cotton grass (*Eriophorum medium*), cloudberry (*Rubus chamaemorus*), and alpine timothy (*Phleum alpinum*). In the sphagnum bogs grew the tiny sundew (*Drosera rotundifolia*) and, in the shallow pools, pond lilies (*Nuphar polysepala*).

The last Mallards were noted on August 28: two males and three females flew low over the west arm of Holtz Bay.

Anas acuta. Pintail. I encountered the Pintail only in the valley of the Temnac River. Here there was one pair on May 10, and three pairs on various occasions between May 21 and August 12. These three pairs almost certainly bred in the vicinity, although I did not find the nests or young birds.

Anas falcata. Falcated Teal. On May 23 and 24, 1945, Lt. E. L. Stone and I observed a male and female of this handsome species, together with two male and two female Tufted Ducks and three male and four female Greater Scaups, on a little "pothole" pond inland from Murder Point. We had abundant opportunity to watch the teals, for they were not shy. On the 24th we saw the male diving several times. He went under rather awkwardly, giving us the impression that he was not used to such activity. The female did not dive while we watched her. Most of the time the birds idled side by side, apart from the rest of the flock, with heads down against their backs. They appeared to be content merely with resting. Possibly they had been blown in from the west by a recent storm. Although they continued to stay close to each other, we were not sure that they were paired, and we obtained no evidence whatever that they nested in the vicinity. Indeed we neither saw them nor heard of them again after May 24.

The tundra about the pond was meadowlike, the vegetation having an admixture of so-called "heath-tundra" plants. Van Schaak collected in the immediate vicinity *Festuca rubra*, *Poa arctica*, *Pedicularis chamissonis*, *Linnaea borealis*; and, in swampy ground not far removed, *Hierochloa odorata*, *Lathyrus palustris*, *Potentilla palustris*, and *Chinanthus borealis*. So far as we could see, the ducks were not seeking any of these plants as food. If they were feeding at all, they must have been doing so on the bottom of the pond, which was only three or four feet deep.

Apparently this Siberian species has been recorded in North America only once previously. A male was secured on St. George Island in the Pribilofs on April 18, 1917 (Hanna, 1920:250).

Anas crecca. European Teal. An adult male European Green-wing frequented the ponds and puddles inland from Murder Point on May 22, 23 and 24. E. L. Stone and I noted it repeatedly on those dates, not only as it rested in the water but also as it flew from place to place.

Aythya marila. Greater Scaup Duck. This winter resident species I recorded frequently from October 5, 1944, to June 1, 1945, principally in salt water but occasionally on one of the larger tundra ponds. Casco Cove and the waters just to the east of Murder Point were its favorite feeding grounds. Here, during the dead of winter, I sometimes saw as many as 20 birds swimming just out from shore or walking along the beach looking for food. On May 23 and 24, as above noted, I saw three male and four female Greater Scaups with Falcated Teals and Tufted Ducks on a pond inland from Murder Point. On June 1, the last date on which the species was recorded, I saw four males and six females placidly swimming about together near shore at the western edge of Casco Cove.

Aythya fuligula. Tufted Duck. Two male and two female Tufted Ducks lingered in the little "pothole" pond inland from Murder Point on May 23 and 24, 1945, as already noted. Here E. L. Stone and I watched them for some time, noting carefully the tuft of long, loose feathers which streamed

down from the nape of each male. There was enough stiffness in these tufts to permit them to fly independently of the rest of the head plumage, yet their curvature was about the same as that of the nape and neck. The four birds dived easily and frequently. They tended to keep in a group by themselves, apart from the scaups and the teals.

The Tufted Duck apparently has not heretofore been recorded in the Aleutian Islands. Collins, Clark and Walker do not list it in their paper (1945). It has been taken once on St. Paul Island in the Pribilofs (Evermann, 1913:17) and is said to be casual in Greenland (A.O.U. Check-list, 1931:52).

Glaucionetta clangula. Common Golden-eye. This species was noted repeatedly from October 20, 1944, to April 10, 1945. I usually saw it in flocks, some of which became so tame that they would not dive nor fly even while automotive traffic was passing noisily on the beach-road only 20 yards away. In February and early April one flock of about 15 birds was composed wholly of males (Sutton and Wilson, 1946:86), but mixed flocks which I saw between April 6 and 10 were composed of 6 to 10 males and 5 to 8 females. I did not observe courtship activity during their period.

Histrionicus histrionicus. Harlequin Duck. Clark's statement (Collins, Clark and Walker, 1945:41) that this duck "is abundant in small flocks everywhere—about rocky shores, exposed reefs, and gravelly banks—and individually or in pairs on inland streams" might lead one to believe that it nests commonly throughout the Aleutians, but I certainly did not see it on Attu in the summer of 1945. The preceding fall it appeared on November 10 and I saw small flocks repeatedly all winter in Holtz, Massacre and Temnac bays. The winter-long population of the southeast end of the island was, I believe, about a hundred birds, some of which regularly shared certain seaweed-covered rocks with Eiders in Casco Cove. I last saw the species in scattered pairs in Casco Cove, on April 4.

Somateria mollissima. Eider. This resident species probably nests in suitable places along the whole of Attu's shore. During the period of egg-laying and incubation the females are not much in evidence, but the males, which idle on offshore rocks or in shallow water along the shore, are very conspicuous. On May 22, 1945, I saw a flock of about 40 males in the middle of Casco Cove. At that time the females were on rocky islets 100 to 300 yards offshore, sitting on their nests. On several occasions in mid-July I saw females with broods of small young. These broods seemed to spend much of their time in the water, but occasionally they walked after their mother on shore, nibbling at the sand.

Lagopus rupestris. Rock Ptarmigan. The Rock Ptarmigan probably does not leave the rugged mountain slopes of the interior in summer. Indeed, I have never seen it or its tracks anywhere along the coast, even in the dead of winter. A male bird which Robert E. Ellis and I observed as we were crossing Fishhook Ridge, between Holtz Bay and Chichagoff Harbor, on June 10, 1945, appeared to be in full summer plumage. It was gray except for the white of the wings. On July 12, 1945, I saw a pair, in full summer plumage apparently, at an elevation of about 1200 feet on the west shoulder of Terrible Mountain (Mt. Buckner), inland from the head of Massacre Bay. On July 28 R. E. Ellis and I encountered a male and two females high on the steep mountain just southwest of Casco Cove (see map, Sutton and Wilson, 1946:84). When we first saw the birds they were walking slowly ahead of us. Suddenly they whirred upward cackling, set their wings, and, following the contours closely, glided slightly down-slope across the mountain.

Erolia ptilocnemis. Rock Sandpiper. I saw this bird the year round, especially on the rocky shores of Massacre Bay, in small flocks in winter and along the same rocky shores, about certain fresh water ponds, and on the comparatively dry tundra in pairs, during summer. On the sandy beaches of Temnac, Sarana and Holtz bays I did not once see it. Along the rocky south shore of Sugarloaf "Island," in Massacre Bay, I saw a few birds each time I visited the place throughout the entire year, but I am not sure that they nested there.

On September 12, 1944, a solitary bird scurried along the edge of a small pond at Alexai Pass, at an elevation of about 1000 feet, north of Alexai Point and fully a mile from the nearest salt water. Here vegetation was sparse, characteristic plants being the *Sibbaldia* (*Sibbaldia procumbens*), the sandwort (*Minuartia biflora*), the downy oat-grass (*Trisetum spicatum*) and a lichen, *Solorina crocea*.

Larus glaucescens. Glaucous-winged Gull. In summer I occasionally saw these gulls at various points about the eastern half of the island. I did not find a nesting colony, however, and I made a point of ascertaining that no Glaucous-winged Gulls preyed regularly on the Tufted Puffin colony on Sugarloaf "Island" in Massacre Bay.

Sterna paradisaea. Arctic Tern. I saw this species occasionally throughout the summer, always singly or in small groups or pairs, never in large flocks, principally on the ocean shore. It was first

recorded along the south side of Sugarloaf "Island" where, on June 22, I counted four birds (probably two pairs) flying back and forth along the tidal flats. Presently the birds made their way up freshwater streams into Peaceful Valley. Here, plunging into the water from heights of 12 to 18 feet, and sometimes disappearing completely beneath the surface, they foraged not far from the heavily populated military area. On June 25, I saw six birds, probably three pairs, along a stretch of beach just south of Sugarloaf "Island." In late June and throughout July I repeatedly saw the species along the beach at Temnac Bay. It was last seen on August 26.

Lunda cirrhata. Tufted Puffin. The officers of certain coastal patrol boats reported seeing scattered sea parrots some 10 miles south and east of Attu on April 19. Shortly thereafter the birds made their way in to their breeding grounds proper. Those which I saw on May 5 in Massacre Bay were standing here and there on the top and sides of Sugarloaf "Island" or were swimming in dense rafts offshore. A colony of about 2300 birds nested here. To the best of my knowledge this was the only colony on the eastern half of Attu (as far west as Steller Cove on the north shore and Etienne Bay on the south shore), although in June and July I saw a few single birds and small flocks (up to 12 birds) in flight at Holtz Bay and Chichagoff Harbor. The latest date on which I saw a large raft of birds in the vicinity of Sugarloaf was July 15. Although I did not record the species anywhere after August 25, I can hardly believe that it left Attu entirely at that time. All adult birds which I saw from April 19 to August 25 appeared to be in full breeding dress. The 200 birds which I saw near Sugarloaf on August 25 still were wearing bizarre head tufts, which bore an unexpected resemblance to bunches of corn silk blowing in the wind.

Sugarloaf is a rocky, turf-covered hummock about 50 feet high, 75 feet wide and 100 feet long which occupies the tip of a flat, low, narrow, 16-acre peninsula or spit, jutting out from the west shore of Massacre Bay. The top of the hummock is thickly grown with rye grass (*Elymus mollis*). To its steep seaward sides cling masses of saxifrage (*Saxifraga bracteata*) and draba (*Draba hyperborea*). All over the flat ground at its base flourish such shore plants as the alpine cress (*Cardamine umbellata*), large-leaved avens (*Geum macrophyllum*), starwort (*Stelleria crispera*) and Eskimo potato (*Fritillaria camschatcensis*). The puffins nested in burrows in the turf on the hummock's sides. The colony probably had inhabited the spot for years, for I found many burrows in November, 1944, before the first heavy snows, and in April, 1945, immediately after the snow had melted. A midden at the base near the landward end bore testimony to the one time existence of a tiny settlement of Aleuts which probably subsisted to some extent on puffins in summer.

When I visited Sugarloaf on May 5, I counted 98 puffins on the hummock's sides and saw three dense rafts in the water about 200 yards offshore. In the largest of these, to the east, I estimated that there were 1000 birds. That to the north was about half as large. In that to the south there were about 750 birds. As I clambered about among the rye grass, puffins seemed to be everywhere about me. Some were standing statuesquely on slopes at safe distance. Others eyed me furtively from the entrances of their burrows. Still others, frightened when I approached within 20 feet, scuttled underground or, leaping into the air on rapidly beating wings, took off for sea. Departing birds spread their vermilion feet stiffly behind them until, having got well under way, they folded their webbed toes and drew them neatly up against their tails. Despite the beating of their wings they descended rapidly. They could not seem to work up sufficient speed for sustained flight until they were within a few feet of the water or the tidal flats. Flying low above the water required no maneuvering; but across the flats they had to steer a zigzag course among the rocks, and sometimes they crashed into a boulder, fell to the ground, picked themselves up awkwardly, ran on their stubby feet for 15 or 20 feet, and once more, with wings beating rapidly, managed to get into the air again.

Puffins came in from sea both singly and in small flocks. In returning, they usually circled the hummock once, then made a "stall landing" in which they dropped on to the turf with about the same abruptness and abandonment they displayed in alighting in water. In rising from the water they were obliged to skip or run on the surface for thirty feet or more before getting under way.

Corvus corax. Holarctic Raven. In summer the raven population scattered widely along the coast and throughout the rugged interior, its distribution at that season coinciding with that of cliffs suitable for nesting. On July 20 I found a nest which was placed in a niche on the seaward face of a cliff about one and a half miles west of Murder Point. The cliff rose abruptly from a narrow strip of tundra fifty feet back from the rocky beach. Soil had gathered in its numerous fissures and pockets and here grasses grew in abundance. The nest was about 16 feet up from the base of the cliff. In it were four half grown

young. One of the parent birds dived at me repeatedly while I was at the nest, dropping to within five feet of my head while I was handling the young.

Troglodytes troglodytes. Winter Wren. This wren was seen the year round, in winter about large boulders, rock piles and grass-covered hummocks along the outer shore, in summer along the beaches as well as at lower elevations inland. Even in winter I often saw what I believed to be paired birds. On June 20 and 24 I encountered a single bird near three large rocks not far from the raven's nest described above. The wren appeared to be feeding here, though I did not see it carrying food to its young, nor did I hear it singing. Much of the time, while I was following it about, it stayed under the rocks; but occasionally it flitted from one to another, or, chattering loudly, hopped to the very top of the highest, then scampered or flew down to the beach and hid again.

Leucosticte tephrocotis. Gray-crowned Rosy Finch. I saw this species repeatedly throughout the winter, but feel sure that it withdraws to the rugged interior of the island to nest. My only summer record is of a single bird which I observed on June 10 as it flitted among the rocks at the eastern edge of the east arm of Holtz Bay.

Melospiza melodia. Song Sparrow. I saw this species the year round, usually in pairs, occasionally singly, never in a flock. Almost daily I encountered it in the vicinity of the military installations along the shore of Massacre Bay and also well inland on the tundra, in Peaceful Valley and Massacre Valley. Somewhat to my surprise I recorded it about Holtz Bay, Chichagoff Harbor, Sarana Bay and Temnac Bay. On the afternoon of August 10, when I was at about 2800 feet elevation near the top of a pinnacle at the head of O'Donnell Valley, and when, because of the dense fog, I could see but 50 feet in any direction, I heard the familiar chip of a Song Sparrow and presently saw one hopping about the scree searching for food among the moss, lichens, and pebbles. This was the highest elevation at which I actually saw or heard the species.

Calcarius lapponicus. Lapland Longspur. This species evidently leaves Attu wholly in winter. On May 2, 1945, about twenty birds (males and females) must have arrived more or less simultaneously in the Massacre Bay district. On that date I saw several brightly colored males giving flight songs in Peaceful Valley and in the passes leading across to the valley of the Temnac River. Throughout lower parts (below 1500 feet elevation) of the eastern half of the island, the species nested commonly. Characteristic plants of its habitat were the lousewort (*Pedicularis chamissonis*), cowslip-leaved avens (*Geum calthifolium*), Indian paint-cup (*Castilleja unalascensis*), willow (*Salix arctica*), and various grasses, mosses and lichens. I last recorded the species on August 30.

Plectrophenax nivalis. Snow Bunting. On September 10, 1944, I saw a flock of fifteen Snow Buntings in fresh winter plumage on Gilbert Ridge, just west of Alexai Pass. Throughout the following winter months I noted Snow Buntings occasionally. In April the species became noticeably more common in Peaceful Valley. On May 3 there were several males and females in the passes connecting Peaceful and Temnac valleys. Most of these birds were paired but a few still were going about in small flocks. In June several pairs were on the lower slopes of Terrible Mountain and on Fishhook Ridge near the north coast of the island. In July and August I encountered pairs and family groups in Massacre Valley and in the vicinity of Chichagoff Harbor, Sarana Bay and Holtz Bay.

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