

SHARP-TAILED AND SEASIDE SPARROWS ON LONG ISLAND, NEW YORK

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To the yachtsman or bayman, the Common Sharp-tailed (*Ammospiza c. caudacuta*) and the northern Seaside Sparrows (*Ammospiza m. maritima*) are probably better known as "salt-marsh sparrows", or "meadow chippies", as they rise up out of the salt-grass onto some stub to observe the passersby, in such places on Long Island's south shore, as among the bay islands and along the state boat channel around Oak Beach, Gilgo and westward. Perhaps the human interest aroused as the birds come up out of the grass often ends then and there as they drop back into the greenery; for to pursue their subjects further the observer would be required to make consistent efforts to invade wet, mucky terrain, often at the expense of many exhaustive hours of searching the marshes, through heat of summer or cold of winter, to acquire knowledge of their life history and behavior throughout the year. Such life history and behavior studies, watching salt marsh elimination and gaining knowledge of fluctuating Seaside and Sharp-tailed populations, have long held the interest of this writer. Acknowledgment is here given to Roy Latham of Orient, Roy Wilcox of Speonk, John Mayer of South Ozone Park and Edmund Morgan, Curator of Tackapausha Museum, Seaford, for their kind assistance in accumulating nesting data and population counts at Orient, Shinnecock Bay, Idlewild and at Oceanside.

GENERAL HABITAT

Three grasses principally make up the vegetation of the salt marshes. *Spartina alterniflora* (thatch) covers the wetter places; *Distichlis* and *Spartina patens* vegetate the dry area. Seaside Sparrows generally occupy the damper locations, although both may be found together at times, especially when nesting.

Long Island's south shore is particularly well fitted for large and expansive breeding grounds for these two species of sparrows. The long gradual slope of the uplands down into the bays permits wide marginal lands that gradually lower into *S. patens* and further grading yields into lush *S. alterniflora*. Marginal lands on the Long Island Sound shore in places are often less than a dozen feet between salt marsh and upland. Cedars and other trees have their roots washed by the high tides in some areas and matted thatch stems are spread around into the edges of the woods and frequently deposited into compact heaps from the broken-up *Spartina* beds. Such conditions no doubt account for the absence of Sharp-tails in late fall, because of the lack of marginal lands suitable for these birds, when driven out of the salt grass by high swirling waters of flood tides.

The entirely different terrain of the south shore marginal lands, adjoining the extensive marshes such as at Gilgo, back up in many cases into heavy beds of four or five-foot-tall, standing thatch, interspersed with occasional dense beds of *Scirpus robustus* (sedge family). This entire mass is further protected as one progresses upland by a backdrop of high-tide bushes (*Iva*) and eight to 10-foot-tall *Phragmites* beds. It was in such an area at Gilgo that my winter studies were made.

HABITS

Northern Seaside Sparrows, the Acadian and Common Sharp-tailed Sparrows congregate together in migration, especially in the fall. Here, grain of the seedtops of the sometimes six-foot *Spartina alterniflora* must be abundant in order to find the birds. In such an area at Gilgo about an acre of deeply silted sand grew a tremendous crop of luxuriant *Spartina* grasses and seeds, which formed a nucleus of strong growth on the north side of the ocean boulevard, one-half mile east of the large former life-saving station at Gilgo on Jones Beach.

A favorable growing season produced maximum conditions for the fall and winter of 1940-41 when principal studies were made. The Gilgo area produced shelter that year for more Long Island wintering Sharp-tails and Seasides than I can find any record of. A great many hours were spent studying the birds that fall, winter and spring alone, both in the nucleus and over dozens of acres of nearby Gilgo marsh land which they infiltrated to feed during good weather. My interest in the area continued, but seasonal variations brought less optimum conditions; and, although the Gilgo marshes continue productive, fill for the divided ocean parkway a few years ago obliterated that particular winter quarters that provided a haven for the wide-ranging sparrows; especially during snowy periods, in the study tract east of Gilgo life-saving station.

SPRING

The sparse normal over-wintering population of the few populated tracts in the suitable marshes are swallowed up in the deluge of Seaside and Sharp-tails arriving from the south. During the studies, Seaside arrivals appeared abundantly in latter April; the Sharp-tails came later, some in early May, but apparently were not in full breeding numbers in one large Idlewild area before May 16-20, and on the Long Island Sound at Loyds Neck before May 18. The Sharp-tails are particularly silent into the first third of May which might partly account for their apparent scarcity compared to the singing Seasides. Acadian Sharp-tails are about the last of the migrating sparrows, appearing around May 30 and trickling through into early June.

In spring, when the *Spartina* is flattened and sparse, both Sharp-tailed and Seasides may fly into *Phragmites*, or into high-tide bushes (*Iva*) and even bayberry (*Myrica*), about as upland as they may go, but almost always with salt grass beneath covering the ground surface. They apparently spend the night in the thick growth near the uplands where they are found in early morning before spreading out into the marsh.

COURTSHIP, NESTING

With Seaside Sparrows singing all over the marshes by late April one year at Idlewild, the first mating was seen on April 28. It took place at 7:55 p. m. in the twilight on a clear windless evening. The female flew to a flat, matted clump of salt hay, the male following silently. Coition followed immediately, the male maintaining his position by a moderately-fast flapping of his wings, disclosing the plain gray wing-linings. After a few

seconds the birds flew off and resumed normal activities. The action took place with no excitement evinced by any other individuals.

The Sharp-tails showed little concern for nesting and singing in early May. Birds were seen pursuing others in threes on various occasions, but no early mating was observed. Nests are usually built within the salt-marsh, sometimes near the border in a high-tide bush (*Iva*), and often in a bent-down clump of salt hay (*S. patens*). One Seaside sparrow's nest in a high-tide bush at Jones Beach had three eggs, May 25; one nest, June 8, containing three very young birds, was robbed. The easterly most nest of the Seaside Sparrow on Long Island was recently found at the east end of Shinnecock Bay by Roy Wilcox. It contained three eggs on June 6, 1962.

The Seaside Sparrow makes a bulky cup lined with finer grasses. The Sharp-tailed usually selects a dry area and builds in a clump of the finer *S. patens*. Edmund Morgan, who found a few dozen nests of Sharp-tailed and Seaside Sparrows in the now filled-in marshes at Oceanside, says that a decade ago the Sharptail occupied the upper edges of the meadow and the Seaside nested nearer the bay. Most of the nests were found in the dense salt hay (*patens*).

Morgan stated that the Seaside Sparrows nests were sometimes found under such objects as floating masses of grassy debris, and once under a couple of thin boards with attached tarpaper. The nests were concealed under such debris which had drifted, during extreme high tides, up on the tops of large clumps of salt grass a foot or two above the grass roots. He discovered such nests as the startled birds flew rapidly out, thus revealing the location.

Three or four speckled eggs are laid as spring advances, resulting in much exciting chipping, as their breeding duties comprise of the hatching and raising of young in July and August. Rarely, juvenile Sharp-tailed Sparrows are found in the plumage bordering that of nestlings into October, sometimes confusing the observer. Undoubtedly, such birds would comprise a very late hatching, perhaps into September.

FOOD

The food of the Seaside and Sharp-tailed Sparrows is quite similar. In the fall it consists largely of the luxuriant oat-like grain of the tall *Spartina alterniflora*. Here fair numbers of both Common and Acadian Sharp-tails and Seaside Sparrows congregate in heavily-seeded, local tracts and feed up on the stalks, swaying back and forth as if playing hide-and-seek with the observer. Squeaking draws them closer for observation. Later in cold weather the seed falls off the ripened heads and accumulates in tiny tidal rifts, sometimes thick enough to hide the mud. This provides some of the winter food in cold weather as the birds go under dense cover during the snowy rigors of winter. Here also, under cover, they feed on such small marine and insect-life as may be found around the muddy root stalks of the dense growth.

They also search abroad on the marshes in milder winter days, and were

in evidence around the creek edges when studied. In spring, summer and fall, they range widely even out on the extreme peninsulas and points which extend into the bay. Here they get much animal matter as indicated by their vegetation-free excreta during the summer months. On one occasion, in October, I saw a Sharp-tailed Sparrow swallow a sand worm, about two inches long, which it had withdrawn from the mud. Occasionally they pull away submerged grasses and pick up small objects coming to view. Occasionally, little depressed paths are made in the soft silt by their continually passing back and forth in their search for such marine life at low tide. I have found the Seaside Sparrow in August take small insects from the stems while up on the *Spartina* stalks scolding. They have suitable bills, well adapted to feed in wet places. The Sharp-tail's bill averages as long and the Seaside's longer than that of the Fox Sparrow, a much larger bird; and the Ipswich Sparrow, usually a bird of the dry, hard sand, has a bill only two-thirds as long as that of the Seaside.

VOICE

Sharp-tailed Sparrow: A rather uncommon call, employed when slightly alarmed, is a light Chipping Sparrow-like "chip", used both in the breeding season and at other times of year. It may be used alone or alternated with a mild, Savannah Sparrow-like "tsip". This latter is much more frequently used in autumn, being often heard from all directions after the observer squeaks to attract the unseen birds, hidden in the tall, seed-bearing *Spartina*.

In winter both Seasides and Sharp-tails, if almost stepped upon, respond with a very sharp "zit, zit", usually uttered as an alarmed bird flies out of the thick growth. During breeding season the common note is a scolding chip, uttered almost constantly as long as the observer remains in the vicinity of the nest. Occasionally, in migration and even in late fall, such scolding may be aggravated by the harsh "ca, ca, ca" of an excited Long-billed Marsh Wren, and in one case at Gilgo, confusion reigned as both Seasides and Sharp-tails came fluttering in from all directions to the scene of the Wren's habitat in a large bed of rushes (*Scirpus robustus*) where they remained, constantly chipping, until the excitement subsided.

In deep winter, both Sharp-tails and Seasides are almost completely silent. The Sharp-tailed Sparrow's song is a poor vocal effort. Roger T. Peterson well describes it "a gasping buzz, tuptup sheeeeeeeee". Singing comes late compared to the Seaside Sparrow, and no singing was heard one year until May 12, and the sing is infrequent until the middle of the month, but later quite frequently given. In fall it may utter the weakest song of any sparrow that I know of — a rather rarely uttered intermittent mouse-like squeaking barely audible for 25 feet. It was heard during mild fall weather at Gilgo from an inconspicuous perch in the six-foot-tall, oat-like *Spartina*.

Seaside Sparrow: the first singing of the Seaside Sparrow was heard at Gilgo in the study area on March 29, and four or five were singing on April 12! The March 29 individual was a wintering bird, as no migrants had come in at that time. These appeared about the middle of April. The Seaside's song is a cheery, reedy performance resembling a little Red-winged

Blackbird. It is more enthusiastically uttered than that of the Sharp-tailed, perhaps due to the much more limited prenuptial molt.

During the height of the nesting season the song is uttered in flight, as the birds flutter above the marsh, and is quite pleasing. The first flight song was heard at Gilgo, May 4.

No singing was heard by the Acadian Sharp-tailed Sparrow on Long Island. Both the call-notes in autumn and the song, when heard by the writer on the marshes of Minas, New Brunswick, Canada, in June and July, resembled those of the Common Sharp-tailed.

ALBINISM

I can recall seeing only one partly albinistic Sharp-tailed away from the 1940-41 study area in many years association with these birds: one at Idlewild with large white wing patches in the late 1930's. Part albinism at Gilgo in the fall and winter of 1940-41, however, proved rather high for the limited population of several hundred Sharp-tails and Seaside Sparrows observed, both migrating and wintering.

In the fall of 1940 I found three Sharp-tails and four Seaside Sparrows partly albinistic — no Acadians. The Sharp-tails were all affected around the head and upper back. In one, the white feathers were almost entirely confined to the superciliary line on one side of the head, and one had a white nape. In two of the more extensively marked of the four Seaside Sparrows, one had an entirely white crown, while the other appeared quite Junco-like in flight, except that it had three lateral bars of white extending along the entire length of the tail instead of two. These were about equal in width to the dark natural gray feathers. The white-tailed Seaside showed a reverse migration to the natural east and west fall movement down the coast of Long Island, and was found in the Gilgo marshes in December, 10 miles eastward from where first located near Jones Inlet in early November! Likewise, the white-crowned bird, first found at Gilgo, turned up three miles eastward at Oak Beach marshes a week later and was seen there for about 10 days.

This apparent reverse migration was not, in the case of the white-crowned bird, a search for better wintering quarters, because the area entered was far inferior to that vacated at Gilgo.

In early January, I found the white-tailed and another partly albino Seaside, along with the white superciliary-line Sharp-tailed, on the same marshy point at Gilgo, and I believe all the albinistic birds seen in the fall wintered. The Junco-like Seaside was last seen in mid-April of the following spring. It showed no plumage change, the prenuptial molt of the Seaside being minor, quite the opposite to the drastic and complete spring molt of the Sharp-tailed.

PLUMAGE, RANGE

The bluish-gray-backed Sharp-tailed Sparrows of autumn become brown-backed, with a complete prenuptial molt in March and April. Strangely, although subjected to the same cutting edges of the marsh grasses, the Sea-

side Sparrow has a very limited prenuptial molt. I know of no described spring molt of the Sharp-tailed on Long Island in the literature, so offer the following: On March 29, 1941, in the study area of Gilgo, Sharp-tails were undergoing a drastic molt. One bird shook itself and a large back feather fell out. One's wing lacked at least two primaries, and several tail feathers were missing. On April 4, one was seen lacking numerous breast feathers; and on April 12, the most drastic molt of all was seen. This bird's tail was limited to one feather, the primaries were mostly gone and the wings folded away from the body as if making room for new ones. The brown wing feathers of the lesser coverts of spring plumage and the buffy feathers around the throat and breast were coming in.

Other birds were seen in various stages of molt from late March into late April. On April 20 one Sharp-tailed showed a half-grown tail, and on April 25 incoming feathers on the sides of the head in one bird were noted. Occasionally, Sharp-tails with yellowish rumps are found in September while still in the brown plumage; this is apparently a brief transitional change before complete postnuptial molt. My attention was first drawn to this by Fritz Scheider of Syracuse, a few years ago, while he was on a Long Island visit. I find no mention of this interesting plumage transition in the literature.

In fall, both the migrating Acadian and the resident Sharp-tails are seen in grain-bearing *Spartina* areas in the marshes, the Acadian often intermingling most commonly in mid-October. John Bull, of Far Rockaway, points out the fact that among museum specimens some birds are confusing. Typical Acadians, however, are more yellowish on the breast and on the eye-line (superciliary), and the blurry gray-streaked underparts separate it from the ochraceous underparts and broad black-streaking of the typical Common Sharp-tailed. A minor proportion — the intermediates — overlapping the nesting range in southern Maine, however, are hard to identify.

I found several Acadian Sharp-tailed Sparrows at Gilgo in late December, 1940, and one on March 29, 1941, in which no plumage molt was evident; but one found on April 19 showed slight evidence of molt, particularly on the back which was browner than in winter and irregularly marked. A. D. Cruickshank, in "Birds Around New York City", 1942 (American Museum of Natural History Handbook Series, No. 13) writes: "Careful studies at Jones Beach in 1940-41 indicated that a few Acadian Sharp-tailed Sparrows remained throughout the winter (J. Elliott). In addition there are records for Baychester, Bronx County, December 15, and 22, 1935 (Hickey, et al.)."

Cruickshank continues with Long Island records: "Jones Beach, Long Island, December 26, 1933 (Vogt); Millneck, Long Island, February 17, 1940 (Cruickshank). A record of one at Oak Island Beach, Long Island, April 25, 1937 (Carleton and Sedwitz) must represent a bird that wintered locally or just to the south of us." All these records come from Region 10. This is a long upward northern extension to Chapman's 1932 Handbook, where he gives the winter range of the Acadian as on coasts of South Carolina, Georgia and northwestern Florida.

Another subspecies, the Hudson Bay Sharp-tailed Sparrow (*Ammospiza*

caudacuta altera) is a rare migrant on Long Island. It is officially declared unidentifiable unless collected. Now apparently all Long Island specimens are relegated to the Hudson Bay subspecies, where about 30 years or more ago all such birds were supposed to be Nelson's Sharp-tailed Sparrows.

Richard B. Fischer, of Cornell University, took a couple of specimens some years ago, perhaps the most recently collected on Long Island. To my own satisfaction, I feel that I have seen the Hudson Bay bird on two occasions — one in December, 1940 and one about five years ago at Jones Beach. The first bird was in the salt marsh at Gilgo, the second, of all places, in a holly tree on the south embankment to the underpass just east of the tower! Both birds were finely streaked below, had the golden buff of the typical museum specimens, which I have reviewed so often, and were definitely Sharp-tails. Although these sight identifications are open to some doubt and unofficial, the latter was the first Sharp-tailed Sparrow I ever found out of the salt marsh, the nearest being a good half-mile away! This would perhaps suggest an overland migrating Sharp-tailed — the *altera* — rather than the coastal birds which habitually resort salt marshes only. The Gilgo suspect also entered upland growth, a peculiarity not shared by some 15 other Sharp-tails and Seaside Sparrows attracted that morning by squeaking. If found constant, such a practice might assist predetermination of suspects for collection in this difficult-plumaged subspecies.

WINTER

In winter the Seaside Sparrow is almost, if not quite, as shy as the Sharp-tailed. They permitted no familiarities at Gilgo in the severe weather on the study area, but spent much of their time down under the thick *Spartina* growth. It is difficult to rush these places, because of exhaustive energy used in tramping around through the heavy thatch and sinking into the oozy mud. Even abrupt approach failed to flush them; and I have had them on one occasion utter sharp call notes instead of flying, as they scampered into the thick grasses, now about three feet high, remnants of the tall, six-foot autumn growth. During mild weather they left their grassy tangles, and here I found them even out on the points of land projecting into the bay, generally near heavy, tufted grass. As the tide rose they retreated inland and if abnormally high were forced into the bordering uplands. Both in February and in March in the study area at Gilgo, in the winter 1940-41, flattened areas where the *Spartina* was broken off a few inches above the sandy mud and crushed flat after a heavy snowfall, sometimes extended 30 to 40 feet across with barely an upright stalk standing.

While approaching such an area one February day, a Sharp-tailed flew ahead of me as if to cross it, but instead darted down into the center and disappeared into the thick matting. I rushed over and ran in all directions, but failed to dislodge the bird or find it on the bordering edges. On a similar occasion in late March, I shied a stick at a singing Seaside Sparrow as it sat on a stake over a large patch of flattened thatch. To my amazement it too dropped off its foot-high perch, uttered a sharp "zit" and ran under the matted flattened carpet of grasses, disappearing before my eyes and was seen no more in that vicinity, although diligently searched for. Such action caused me to call them "mice birds" as they pursued their beaten runways,

somewhat resembling the even more secretive but scarcely more elusive meadow mouse.

A heavy concentration of both species wintered through into 1941, and on January 18, I found 16 Seaside Sparrows, this being equal to the late December, 1940 count. It was a mild windless morning and because of this birds came up freely. The four or five Sharp-tails, as usual, were shier and less willing to be seen above the grass than the Seasides, and there were undoubtedly more than those found. The birds were well spread over the marshes and in one case a Seaside scolded me from a distance of over 100 feet in response to my squeaking. Mild windless weather, however, is very essential for good observation, and even the Seaside sparrows show little inclination to be attracted out of the matted grasses in cold, windy weather; nor are they then inclined to respond to squeaking or any other noise to arouse their curiosity.

ENEMIES

I have found mink tracks intermingled with those of autumn birds at Jones Beach, and minks themselves in such places on several occasions, but no sparrow fatalities. There are occasionally cats left on the beaches; and also cats, rats and weasels along the mainland marshes which, with the mink, probably get a few birds, especially in nesting season.

Marsh Hawk pellets occasionally contain sparrow remains and these low-couraging hunters were found quartering the marshes; but from progressive seasonal observations in the study area, there appeared to be no great loss of birds during the winter of 1940-41, as the sparrows, usually partly concealed, moved with great rapidity on their strong legs and in a flash they were gone. At Gilgo, during the study period, they were strongly entrenched in the upland border-lands which bade well for winter survival.

At the Jamaica Bay sanctuary marshes, upright stalks of *Spartina* may extend to several feet and in any but severe winters the birds appear to winter well also.

DISTRIBUTION

Being strictly coastal, their only habitat salt marshes, both the Seaside and the Sharp-tailed (both Common and Acadian) are almost entirely restricted to Long Island in New York state, especially in recent years with continual elimination of salt marshes on Staten Island and in the Bronx, New York's other coastal areas.

Roughly, three intermittent strips of salt marsh extend down Long Island in addition to bay islands and Peconic Bay areas. These are: marshes bordering Long Island Sound, those inside the Atlantic Ocean barrier beach, and the dryer marshes north of the bays on land margins bordering south shore villages (now fast disappearing).

Seaside Sparrow: This species is unknown as a breeding bird around Long Island Sound and on Long Island marshes anywhere east of Shinnecock Bay. Eastward from Brooklyn it is fairly well distributed around Jamaica

Bay (including a small colony in the bird sanctuary in The Raunt) and eastward to Rosedale. It reappears on the north side of the bays at Freeport and along Meadowbrook and Wantagh Causeways, being fairly common at Cedar Creek, Wantagh, but no further eastward anywhere on the village-bordering marshes to Moriches. It has its greatest numbers on the ocean beach marshes. These range from Lawrence and Lido eastward to Oak Beach with an abundance at Jones Beach, Gilgo and eastward to the vicinity of Captree. West of Captree it is distributed on many bay islands. It is absent from the two Fire Islands (out in Great South Bay, east of Captree), and for about 20 miles eastward (for lack of marshes) to Long Cove on the ocean beach south of Patchogue. On a survey, a few pair were found on Ridge Island and on the small marshes on Pattersquash Island (near Mastic).

East and west of Moriches Inlet rather large marshes are productive with numerous nesting birds. Their range terminates some 10 miles eastward where Roy Wilcox finds the species on the eastern end of Shinnecock Bay, their most eastern breeding place on Long Island. Roy Latham of Orient claims that it disappeared from that area around the turn of the century when burning of the dry marsh grasses became customary.

Sharp-tailed Sparrow: Turning to this species, we find it by far the greatest sufferer from the loss of large tracts of salt marsh on the landside of the western bays, from Spring Creek to Lindenhurst in particular. For hundreds of years these marshes stood high above normal tides with a heavy growth of *Spartina patens*, or *Distichlis* — the salt hay used by farmers to winterize drafty buildings. These marshes were very desirable for breeding Sharp-tails, but too dry a habitat for the Seaside. Continual waterfront real estate developments obliterated hundreds of acres. The fill for the Idlewild airport obliterated the finest known colony of Sharp-tails on Long Island, in the old Cornell Creek section bordering Jamaica Bay. John H. Mayer, of South Ozone Park, estimated its nesting population at over 200 individuals. Other large filled-in meadow tracts are present in Oceanside, Bellmore, Wantagh, Seaford, Massapequa, Copaigue and Lindenhurst. Therefore, the almost continuous nesting habitat for the Sharp-tails of four decades ago has been so completely filled, that there are but few remaining colonies along the north side of the bays in Queens and Nassau counties. Intermittent nesting areas occur from Islip to Mastic. From there they are found on the dryer marshes on both sides of Moriches Bay. They are fairly abundant east of Moriches Inlet and in the Shinnecock area. Further east a few were noted at Montauk (Napeague) marshes and in several areas near Shelter Island and on the Peconic Bay side of the North Fork.

Sharp-tailed Sparrows were also seen in small numbers on the Sound, especially at Crab Meadow, and locally west to Mill Neck and beyond for a few miles. They are still fairly common around Jamaica Bay, breed at the bird sanctuary at The Raunt, and are abundant along the ocean beaches where associated with Seaside Sparrows eastward to Gilgo and Captree and I have found them on a survey on one of the two Fire Islands to the east of Captree.

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