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FIELD NOTES ON SOME LONG ISLAND SHORE BIRDS.

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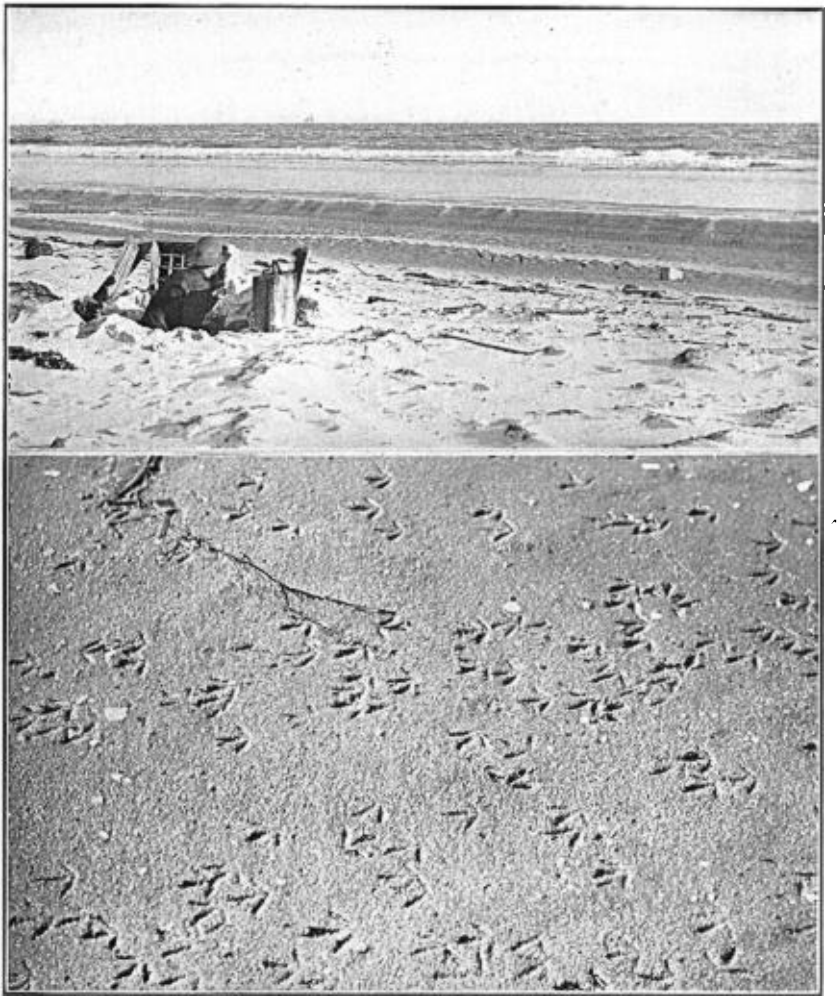
Plates VII–XIII.

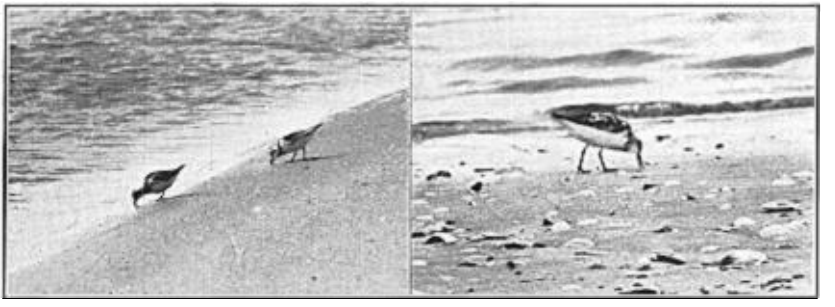
LONG ISLAND, with its abundant and varied avifauna, has long been one of the most thoroughly canvassed fields for ornithological work in America. Naturally the water birds hold first place among its attractions. Of the Limicolæ alone, nearly fifty species have been recorded, including a considerable number of European forms and others of rare or accidental occurrence. Unfortunately, bird students in general are rather neglectful of the shore birds, and allow most of the records to be made by gunners or collectors, who— at least as far as Long Island is concerned — have seldom done more than publish migration data or the occurrence of unusual forms. As a consequence, Giraud's work [1] of seventy-two years ago, though far from exhaustive, still furnishes the fullest, and in some respects the best, account that has been published of the habits of most of our shore birds.[2]

Since Giraud's time important changes have taken place in the limicoline life of Long Island. The Dowitcher is no longer present in the abundance of former days. The Robin Snipe, well known to

[1] J. P. Giraud, Jr. The Birds of Long Island. New York, 1844.

[2] Mr. George H. Mackay's excellent studies of a few species on the Massachusetts coast, published in 'The Auk' over twenty years ago, must not be overlooked. See Vol. VIII, 1891, 17–24 (Golden Plover); IX, 16–21 (Eskimo Curlew); IX, 143–152 (Black-bellied Plover); IX, 294–296 (Red Phalarope); IX, 345–352 (Hudsonian Curlew); X, 25–35 (Knot).





1. BLIND AND DECOYS ON OUTER BEACH. 2. SANDERLING TRACKS.
3, 4. SANDERLINGS FEEDING.

the old-time gunners, has been so decimated that now each occurrence is worthy of note. The Eskimo Curlew is a bird of the island's past, and the Golden Plover bids fair to share its fate. The merest remnant of Bartramian Sandpipers yet keeps a foothold at the extreme eastern end of the island. Certain other species, however, have fared much better, and probably a few have not shown any considerable decrease in the past quarter of a century. Large flocks of Least and Semipalmated Sandpipers are still common sights, and even so persistently sought a species as the Greater Yellowlegs has survived in goodly numbers. Apparently the recent agitation for wild-life conservation has already begun to have an effect toward restoring the numbers of our shore birds.

For a number of seasons past we have been able to give considerable attention to the Limicolæ occurring on the marshes and beaches along the south side of Long Island. Most of these are migrants, which generally hurry past, sometimes flying so high in the air as to escape notice. When they do alight to feed on some favorable spot, they are often extremely wary and difficult of approach; yet if one adopts the regular gunner's method, building a blind of bushes for himself, and luring the birds with a flock of decoys planted on sticks, he may find that not only do a surprising number of visitors come, but that some of them are very tame.

The type of blind varies with the nature of the ground and the materials available. On the beach one may scoop out a pit in the sand and build up its ramparts with stranded boxes, logs, or sticks (Plate VII). At a pool on the salt marshes the high-tide bushes (*Iva oraria*), whose green leaves match the color of the surrounding marsh-grass (*Spartina*), make the best sort of blind (Plate IX). They are stuck upright into the soft ground in the form of a more or less complete circle, within which the hunter sits. Bayberry bushes (*Myrica carolinensis*) furnish a closer cover, but are more conspicuous, and therefore less suitable, than the high-tide bushes. Drifted eel-grass and dead stems of marsh-grass are useful for filling gaps in a scanty blind. Occasionally a gunner may sit behind a mere screen of cloth, but a photographer requires a less conspicuous affair and better concealment for work at closer range. The decoys, which are made of tin, wood, or even cardboard, are known on Long Island as 'stool.' The arrangement of the stool

and the blind for the most successful results, especially when photography is the object, calls for considerable experience and skill on the part of the hunter.

The snipe fly up the wind toward the stool, often setting their wings and sailing in first from one angle, then from another. As they approach, their characteristic whistles add to the thrill of the moment. A skillful imitation of these will often bring them in more surely, or turn a passing bird which otherwise might have merely whistled to the stool. The critical moment comes just before they are ready to alight; when actually among the artificial birds, some individuals (especially of the smaller species) seem to take their security for granted. We have very frequently planted our stool in a foot or more of water, where incoming birds could not judge the depth on account of muddiness or surface reflections. In such a case, they often flutter about from one deceiver to another, dipping their feet into the water, and becoming bewildered by their inability to find bottom (Plate XI, fig. 4). If a little mound of mud or seaweed has been prepared to project above the surface near the decoys, a bird will sometimes alight upon it, giving the camera-hunter a shot that may amply repay him for long days of devotion to the difficult but fascinating sport of snipe photography.

May and August are the months in which these birds occur in greatest numbers. As many species are found through September, but after the first week a majority of them fall off in abundance of individuals. The influence of the weather on their southward migratory flight is frequently noticeable. Clear weather and strong northwest winds bring few birds, and those that appear do not come well to stool. At such times doubtless many birds pass by well out at sea. Protracted southerly winds, moderate southwest breezes, and cloudy or showery weather seem to furnish proper conditions for the best flights over the shores and bays. On favorable feeding grounds the birds may be found at practically any time, and their flights from one spot to another on the marshes or mud-flats may, of course, take any direction. In certain other places, however, the flight is seen to be of a truly migratory nature. For example, along the comparatively narrow channel connecting Moriches and Great South Bays, where feeding grounds are so limited as to scarcely induce the birds to alight, a large majority

of them in the fall come to stool from the eastward and leave to the westward, though usually there is also a small minority traveling in the opposite or other directions. Here the birds generally appear at about sunrise, and are most abundant early in the day.

The present paper aims to furnish an account of the migrations, haunts, social and feeding habits, call-notes, field characters, and general activities of eleven species of shore birds, as we have observed them on Long Island. The migration data have been gathered from every available source, including not only the published writings of Dutcher,[1] Cooke,[2] Braislin,[3] and Eaton,[4] but also the manuscript records of a number of other ornithologists, chiefly fellow-members of the Linnæan Society of New York. For cooperation in this and other respects we are glad to express our appreciation and indebtedness to Messrs. William Floyd, Ludlow Griscom, Arthur H. Helme, William Helmuth, Stanley V. LaDow, Roy Latham, Robert Cushman Murphy, Chas. H. Rogers, H. F. Stone, Henry Thurston, and J. A. Weber. We also have to thank Dr. Frank Overton for generously permitting the use of his photographs of the Northern Phalarope. All the other photographs were taken by the writers.

In the case of each species we have endeavored to give the earliest and latest migration dates, together with the locality and the observer's or the recorder's name wherever possible. In addition to the scientific names and the accepted English names, as given in the A. O. U. Check-List, we include a number of local names that are in more or less common use on Long Island.

Lobipes lobatus. NORTHERN PHALAROPE.— Uncommon transient visitant. In following its usual migration route, this phalarope seems to pass at some distance off the Long Island coast, but occasionally (and especially during stormy weather) it reaches our shores. The spring dates range from April 2, 1911 (Long Cove, Overton and Harper), to June 3, 1894 (Montauk Point, Scott); the fall dates, from August 5, 1893, to October 22, 1888 (Montauk Point, Scott).

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[1] Numerous records furnished for Chapman's Handbook of Birds of Eastern North America (1894) and for Eaton's Birds of New York (1910).

[2] Distribution and Migration of North American Shore Birds. Washington, 1910.

[3] A List of the Birds of Long Island, N. Y. Abstr. Proc. Linn. Soc. N. Y., Nos. 17–19, 1907.

[4] The Birds of New York, Part I. Albany, 1910.

1, 2. NORTHERN PHALAROPE. 3. "OXEYE" AND DOWITCHER.

The presence of the species at Long Cove, on the inner side of Fire Island Beach, at so early a date in the spring, was probably accounted for by a gale that had been blowing for a day or so previously. The wind was strong out of the northwest at dawn, when we looked out from the window of a bayman's shanty and spied two small snipelike birds swimming among the ripples in an indentation of the shore several yards away. A few moments later, having hastened forth with cameras and field-glasses, we found one of the birds feeding along the outskirts of a large floating bed of eel-grass in the cove. It swam easily back and forth, sometimes clambering over a bunch of eel-grass in its way; and though we advanced in the open nearer and nearer, it appeared much more interested in securing its breakfast than in watching our motions. When pressed too closely, however, it gave a jerky, half-petulant little note, *pip*. Several times, too, it took wing for a short distance, but was readily approached again. Once, while being photographed, the bird was directly between the two observers, barely out of arm's reach (Plate VIII).

During the southward movement of shore birds in August, one occasionally finds a Northern Phalarope among the meadows along the south shore. Floating water-weed is a favorite place for the birds to alight. They walk about over it or swim across bits of open water indifferently. Most of these birds are in the dark immature plumage, and very confiding, apparently knowing nothing of man. On taking wing, they utter a chipping note suggesting somewhat that of the Sanderling. An adult bird observed on August 21 had the plumage already very gray.

On August 16, 1913, a single Northern Phalarope was observed to flutter down to the surface of a small pond-hole in the marsh back of the beach near Mastic. It sat on the water like a little duck, and presently crouched on a lump of bog, where two Oxeyes crowded beside it, there being scarcely room for all three birds. It seemed to have considerable attraction for several Oxeyes that were flying about, for they stooled to it nicely, even when it was swimming where they could not alight. Though flushed more than once, it returned always to the same vicinity. In flight its blackish upper surface, with the white stripe near the posterior edge of the wing, was striking.

On the 28th and again on the 30th of August, 1915, two birds were observed on the water-weed which carpeted a considerable portion of the surface of a shallow cove in the marsh back of the beach at Mastic. On each date it was doubtless the same two individuals, which had found a congenial spot and were lingering there. As they moved about, their manner of snapping up food reminded one of the Spotted Sandpiper.

Macrorhamphus griseus griseus. DOWITCHER; DOWITCH.— Though formerly abundant, and still usually referred to as a common transient visitant, this is one of the shore birds whose numbers on Long Island have shown a very marked decrease in the last fifty years. At present it is a regular but scarcely common migrant along the south shore. The bulk of the spring migration takes place in May, extreme dates being April 19

(Seaford, R. L. Peavey) and June 12 (Eaton). The southward flight reaches Long Island as early as July 4 (Eaton), and continues as late as September 29 (Freeport, Braislin).

The Dowitcher frequents the bare tidal shoals and the muddy borders of the marshes, seeking its food usually in the shallow water or close to its edge. At present the birds are not, as a general rule, sufficiently numerous to form flocks of more than a few individuals; and frequently only a single Dowitcher is observed, either by itself or in company with other species, such as Yellowlegs, Stilt Sandpipers, Oxeyes, or Ringnecks.

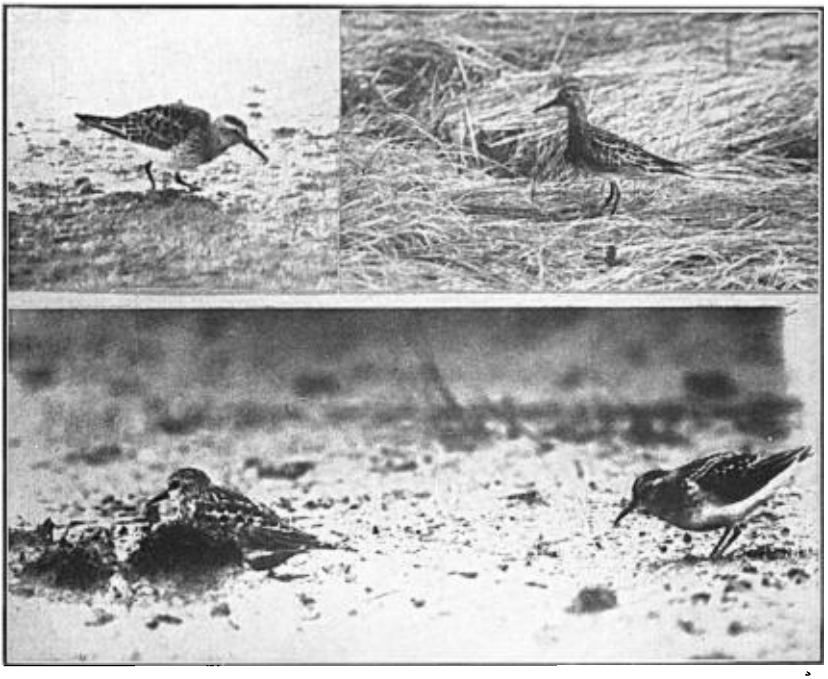
In the August migration of 1913 (which was light for most species), the Dowitchers appeared in somewhat larger force than usual; four or five small, unmixed flocks were seen, which flew low and steadily, and on most occasions failed to act in accordance with their well-deserved reputation for unwary response to decoys. At about sunrise on August 17, however, a flock of seven, accompanied by a Lesser Yellowlegs, stooled beautifully at the edge of a meadow island near Mastic, alighting on a muddy point not far from the blind. The Yellowlegs, which was nearest, soon took alarm and continued its migration to the westward, whistling as it went, but the Dowitchers showed remarkable tameness, and allowed several photographs to be taken before they, too, departed.

The common note of this species is a soft, rather abrupt whistle, which usually sounds like *wheu-whup*, or *wheu-whup-whup*, but is subject to further variation. Its tone, though a little less shrill, is not very different from that of the Lesser Yellowlegs' whistle. Now and then a rapid series of rolling, guttural notes surprises the hearer.

Though the bodies of the Dowitcher and the Lesser Yellowlegs do not differ greatly in size, the former's bill is noticeably longer, and its legs noticeably shorter. Its stocky build, the darkness of its summer plumage, and the narrow white patch on the back, which forms a very striking mark when the bird is on the wing, are other good field characters. So also is the grayish-white posterior margin of the wing in immature birds. In its steady and well-sustained flight the Dowitcher has a peculiar appearance, for the body is inclined downward from the head toward the tail, while the long bill points earthward at a corresponding angle.

Pisobia maculata. PECTORAL SANDPIPER; KRIEKER; GRASS SNIPE.—An early but rare spring migrant; March 22 (Eaton) to May 30, 1913 (Freeport, Thurston). Fairly common from late July through October; the earliest fall record is July 6, 1911 (East Hampton, W. Helmuth), and the latest, November 10 (Eaton).

Though the common haunt of this species is suggested in one of its vernacular names (Grass Snipe), it is not infrequently found also on mud-flats and along the margins of marshy pools and streams. It usually travels and feeds in small bands of its own, but sometimes one or two birds are observed in a scattered flock composed chiefly of the smaller species of snipe. The Kriekers join ranks on the wing, but become more loosely organized after alighting to feed. Each bird moves slowly along, and



1. BLIND AND DECOYS ON SALT MARSHES.
2. WHITE-RUMPED SANDPIPER. 3. PECTORAL SANDPIPER.
4. LEAST SANDPIPERS.

probes into the mud with a rapid drilling motion of its bill, which apparently remains closed, though the tip, at least, must be opened beneath the surface when a morsel is located. We have seen one squat in a skulking attitude on the mud behind a short cat-tail stub, when it had been annoyed by persistent stalking; and we have also seen birds wade into a little stream and swim a foot or two to the other side.

Though the Krieker is an unusually trustful snipe, it is well known, on the other hand, for its lack of response to decoys. We were especially pleased, therefore, with an experience we had at East Pond, Hicks Beach, on September 30, 1911. It was near dusk when a band of eight or ten small snipe appeared, flying low over the eastern end of the pool and heading our way. The birds swung gracefully from side to side as they came on, and having caught sight of our decoys, wheeled in over them. They had scarcely passed by before they turned and dropped in, closely bunched, at the edge of the mud-flat, 18 feet in front of us. There they stood daintily, eyeing the occupants of the scanty blind with curiosity or wonder, as it seemed, rather than with suspicion or alarm; but after some moments they took wing and departed.

The Krieker has two distinct notes — a short *kuk* or *chup*, and a hoarse, rolling whistle, *k-r-r-r-u*, *k-r-r-r-u*.

The heavy streaks on its breast end in a rather abrupt line across the body, and serve as a good field identification mark. These dark markings, however, are of protective value when the Krieker's head is erect, for the breast is then practically a part of the upper surface of the body, where dark coloring is required to render the bird inconspicuous among its surroundings.

Pisobia fuscicollis. WHITE-RUMPED SANDPIPER; BONAPARTE'S OXEYE; BIG OXEYE.— Rare in spring. We find only the following records, all except one within very recent years: June 10, 1882 (six, Mt. Sinai Harbor, Helme); May 21, 1910 (two, Long Beach, LaDow); May 22, 1910 (six, Freeport, Weber and Harper); May 21, 1911 (two, Oak Island, Harper); May 28, 1911 (one, Long Beach, Griscom); May 30, 1911 (five collected by J. A. Weber out of a flock of about 25 on Jamaica Bay); May 23–24, 1915 (fairly common at Gilgo Flats, Johnson, Rogers, Weber, and Harper). Fairly common fall migrant; usually present from the middle of August to the middle of October, and noted as early as July 4 (Eaton) and as late as November 4, 1912 (East Hampton, W. Helmuth).

If one looks carefully through the large mixed flocks of snipe that resort during the migrations to such favored feeding grounds as the Gilgo Flats or the Oak Island pool, he will seldom fail to discover one or more Whiterumps among the others. Separate flocks of this species, consisting usually of only a few individuals, are also observed.

It feeds on the bare tidal flats, at the pools in the marshes, and on the sands of the outer beach. In common with the smaller Oxeyes, it is unsuspicious in disposition. It sometimes crouches on its tarsi when startled, and is then extremely inconspicuous on the mud. We have seen it come over stool, though ordinarily it does not respond to them.

Its flight is much like that of the Least Sandpiper; at times flocks pass by in a direct and unhurried manner, but we have noticed single birds whose flight was swift and darting.

The baymen and gunners do not usually distinguish it from the other Oxeyes, but we have occasionally heard it spoken of as Big Oxeye. It can be readily identified in the field by its slightly larger size and by its white upper tail-coverts, which show conspicuously in flight. On the ground the bird stands low, and is very concealingly colored, like the Krieker, which it resembles also in build. Perhaps as diagnostic as any other characteristic is its note; this is an exceedingly sharp and squeaky, mouse-like *jeet*, which the bird utters on the wing, and which, when once learned, is unmistakable.

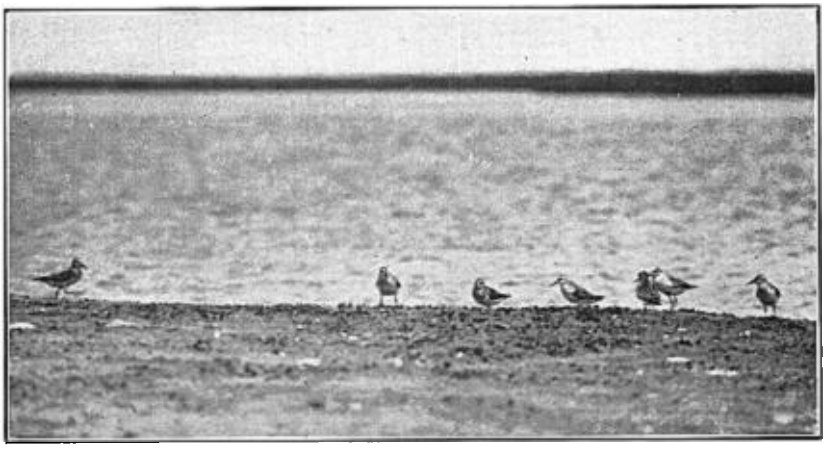
Pisobia minutilla. LEAST SANDPIPER; OXEYE; LITTLE OXEYE. — Abundant spring and fall migrant. It is present usually throughout May and from about July 8 to September 20, preceding the Semipalmated Sandpiper by about a week, on the average, both in arriving and in departing on its migrations. It has been recorded from April 20 (Eaton) to June 12 (Orient, Latham), and from June 27 (Orient, Latham) to October 14, 1912 (East Hampton, W. Helmuth).

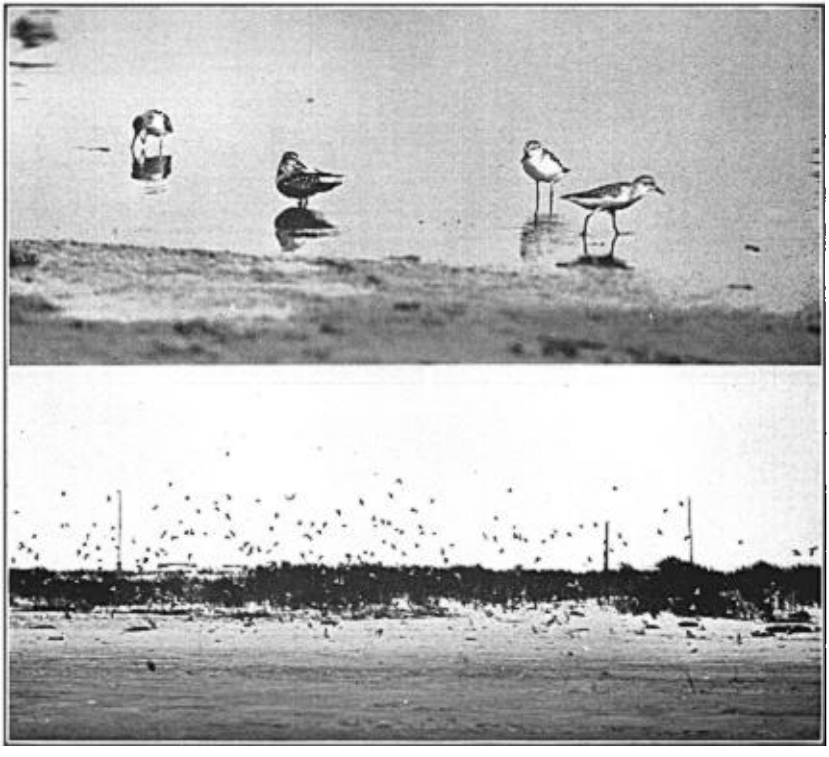
The Least Sandpiper sometimes occurs on the ocean beach, but is much more characteristic of the marshes and mud-flats; it is also seen commonly on floating beds of eel-grass in quiet coves and bays. It is very gregarious, and travels usually in small bands of three or four to twenty individuals, but may be seen in much greater numbers. Practically every large mixed flock of shore birds on Long Island contains Least Sandpipers; these, however, keep more or less to themselves, though feeding over the same ground with Semipalmated and White-rumped Sandpipers, Ringnecks, and others. The Oxeyes are also very apt to follow the movements of Yellowlegs without associating very closely with them.

Both the Least and the Semipalmated Sandpipers are very easily attracted to stool, but in walking about are apt to become nervous when they see a tall tin Yellowlegs towering above them. The stool are usually set out in the water, but the Oxeyes, with their short legs, prefer to alight on the bare ground, and when there is no convenient mud-bar, will often pass by without a pause.

In securing its food of minute animal life, the Least Sandpiper either picks it up from the surface of the ground, or probes for it with a drilling motion into the mud and sand, sometimes through shallow water, in which it may thrust its bill entirely out of sight. It walks about in a rather leisurely manner, though meanwhile it gleans carefully and industriously.

No more trustful snipe visits the Long Island shores; and it is not a very uncommon experience for the photographer to see some of these little fellows moving about fearlessly within a dozen feet of the place where he stands in full view. At such times, as the members of a small band feed and bathe, rippling the water with their wings, preening their feathers, and even scratching their bills with their toes, they present a charming scene.





1. SEMIPALMATED SANDPIPERS. 2. LEAST AND SEMIPALMATED SANDPIPERS.
3. SEMIPALMATED (AND OTHER?) SANDPIPERS.

The notes of the Least, though confused with those of the Semipalmated Sandpiper, are generally distinguishable. The loudest and most characteristic is a grating *k-r-r-e-e-p*, often heard from single birds just taking wing or already in swift and erratic flight, as well as from small bands maneuvering high in the air. At times it doubtless denotes alarm, and it seems also to signify 'Where are you?' and to be used with the purpose of locating others of the species. There is also a much abbreviated note, which may be represented as *cher*, but is subject to marked variation; this may be used by the members of a flock as a conversational call, or it may represent slight uneasiness when either a single bird or a flock takes a short flight to avoid a person. Still another note is a soft, rolling *k-r-r-r-r-r*, not very different from the whinny of the Semipalmated, but less pronounced and much less frequently heard.

In common with two other members of its genus, the Krieker and the Whiterump, which wear an inconspicuous plumage much like its own, the Least Sandpiper has the curious habit of squatting or crouching when danger is near. We had stalked four of these birds at a pond-hole in a brackish meadow bordering Moriches Bay, and they had become so accustomed to our presence that they were feeding, finally, at a distance of only eight or ten feet. One of us happened to move in a way that alarmed the little sandpipers, so that one of them immediately squatted down on the wet mud, while another crouched with its head lowered. The camera was opportunely focused upon them, and caught them in the act (Plate IX). At such times the birds apparently like to get some little obstruction like a mud-lump, if possible, between themselves and the source of danger.

Ereunetes pusillus. SEMIPALMATED SANDPIPER; OXEYE; BIG OXEYE. — Abundant transient visitant, outnumbering even the Least Sandpiper by probably two to one. Though the Semipalmated is generally a tardier migrant than the other, both species reach the height of their abundance during the latter part of May and through the month of August. Extreme dates for the spring migration of the present species are April 28 and June 13 (Eaton); for the fall migration, July 4 and October 15 (Eaton).

This sandpiper is at home on the marshes, the mud-flats, and the outer beaches. It is observed in almost any numbers, from single birds to one or two hundred together, and occasionally many more. About the third week in May, from the marshes south of Freeport, we have noticed thousands of migrating snipe following the coast eastward in immense and fairly compact flocks; and it is probable that these flocks consisted chiefly of the Semipalmated and Least Sandpipers.

The feeding habits of both species are in general similar, but *Ereunetes* moves about more rapidly in search of food, is stronger on the wing, and shows a greater tendency toward bunching and wheeling. It seems not unlikely that the greater activity of the Semipalmated is associated with its habit of frequenting the surf-beaten shore, while the more leisurely ways of the Least, on the other hand, correspond with its preferred habitat on the quiet mud-flats and marshes. There are few more pleasing sights

along our shores than a band of Oxeyes trotting down the slope of the beach in the wake of each retreating wave, turning just in time to avoid the wash from a new breaker, and keeping barely in advance of its foamy front as they run back over the sands. Sometimes they linger a little too long for some morsel, and the water surges about their legs, forcing them into flight. The members of a flock do not separate widely when feeding, and upon taking wing, they close ranks and move in a compact body. If not disturbed, they fly steadily, but if they become alarmed from some cause, such as a gunshot, they dart from side to side in an erratic course.

The Gilgo Flats, on the inner side of the beach opposite Amityville, are an especially favorable place for observing Semipalmated Sandpipers in large numbers. The flocks start at dawn in search of food, and continue to move about actively for two or three hours. But by eight o'clock on a midsummer morning the birds have temporarily satisfied their hunger, and begin to collect in dense bunches on the inner and drier parts of the flats. Here they rest quietly and doze away with heads tucked in the feathers of their backs. In the space of a few rods as many as three hundred birds may congregate in numerous small and compact groups. At a distance these groups remind one of exposed beds of mussels; or if, at one's approach, some of the birds keep raising and lowering their wings, undecided whether to fly or not, they even suggest a cluster of butterflies on the sand.

Most Semipalmated Sandpipers are very confiding, though some individuals, which doubtless have been much persecuted, exhibit surprising wildness. The members of this species come to stool in greater numbers, probably, than any of the other Long Island shore birds, and many of them pay dearly for their gentleness and sociability, since gunners very frequently turn their weapons upon the little Oxeyes for want of bigger game. Birds with a crippled wing or a dangling leg, or with only one leg, are no uncommon sight, and at times the proportion of cripples to able-bodied birds is sadly large.

One of us in the Northwest has observed a Semipalmated Sandpiper crouching on its tarsi when alarmed, exactly in the manner of the Pectoral, White-rumped, and Least Sandpipers, but we have never noticed this habit in the present species on Long Island.

The ordinary note of this bird is a quick, monosyllabic *ch-r-r-uk*, sometimes shortened to a mere *kuk* or *kip*. A most pleasant little whinnying call, *eh-heh-heh-heh-heh-heh-heh*, is uttered in a contented, sociable tone by a bird either on the ground or on the wing, and is a common sound in migration time on the marshes and tidal flats. Variable as the notes of this species are, they are always distinguished by the absence of the *ēē* sound which is characteristic of the Least Sandpiper's common note.

Each species so resembles the other, both in habits and in appearance, that it is by no means easy to distinguish them in the field except under favorable conditions. The points of difference are really numerous, but all of them are slight. The Semipalmated is a little larger, its general coloration is lighter, its breast less heavily streaked, its back less rusty in

the summer plumage, its bill stouter, and its legs darker. There is also less contrast between the dark middle and the light outer tail-feathers in this species than in the Least Sandpiper, as one may observe when the birds take wing directly away from him. Moreover, one who is familiar with their notes has an excellent means for separating the two species.

The females have decidedly longer bills than the males, and may be readily picked out of a 'bag' of birds by this character.

Calidris leucophæa. SANDERLING; SURF SNIPE.— A very common migrant on Long Island. It is one of the hardiest of our shore birds, being among the first to arrive in the spring as well as among the last to depart in the fall. It is even noted occasionally during the winter. It has been recorded on the migrations from March 15 to June 14, and from July 4 to December 8 (Eaton). On the southward flight it is usually present from late July to late October.

Though the Surf Snipe, true to its name, loves to run up and down the outer beach along the surf-line, it is also found very commonly on a sandy inner beach, such as that bordering Fire Island Inlet, and sometimes on a wide tidal flat along one of the numerous channels at the western end of Great South Bay. It occurs also on the open gravelly points projecting into Long Island Sound. We have seen but one bird — a cripple — actually on the marsh. Even passing birds have been noted but once during several years' observation at the junction of marsh and bay behind the beach at Mastic.

It generally travels in bands of five to twenty individuals of its own species, but larger numbers are occasionally observed together, and many single birds are met with.

The Surf Snipe is less shy than suspicious. In feeding along the beach, it will allow a pedestrian to follow it at fairly close range, and it will almost invariably come close enough to a blind to be at a gunner's mercy; yet it seldom musters the courage to pass directly in front of the blind within good photographic distance. Sometimes its apprehensions seem directed toward the large tin decoys, and it will pass them on the wing instead of walking or trotting among them in its progress along the shore.

The birds feed in a close flock, as they hurry along just where the wash from the sea rolls upon the beach. They obtain their food by rapid probing in the wet sand, whether its surface is bare or covered with a thin film of water; and they undoubtedly fare well upon the small but abundant animal life of the ocean's edge. What seems to be photographic evidence of the flexibility of the upper mandible of this species, was secured at Short Beach on August 14, 1910. In the photograph the bird's bill is apparently open at the tip where it touches the sand, though closed for the basal half of its length (Plate VII).

The Surf Snipe is strong on the wing. Flocks are often observed as they maintain their line of flight either over or just beyond the surf, keeping rather close to the water, and now and again wheeling with perfectly concerted action. When on the ground, the birds are able to move their legs

with machinelike rapidity, and sometimes travel along the beach at a trot faster than a man's walk.

The note of this species is a not very loud *ket, ket, ket,* uttered singly or in a series, and in a slightly complaining tone. We have heard it on a moonlight night from birds flying about over the beach.

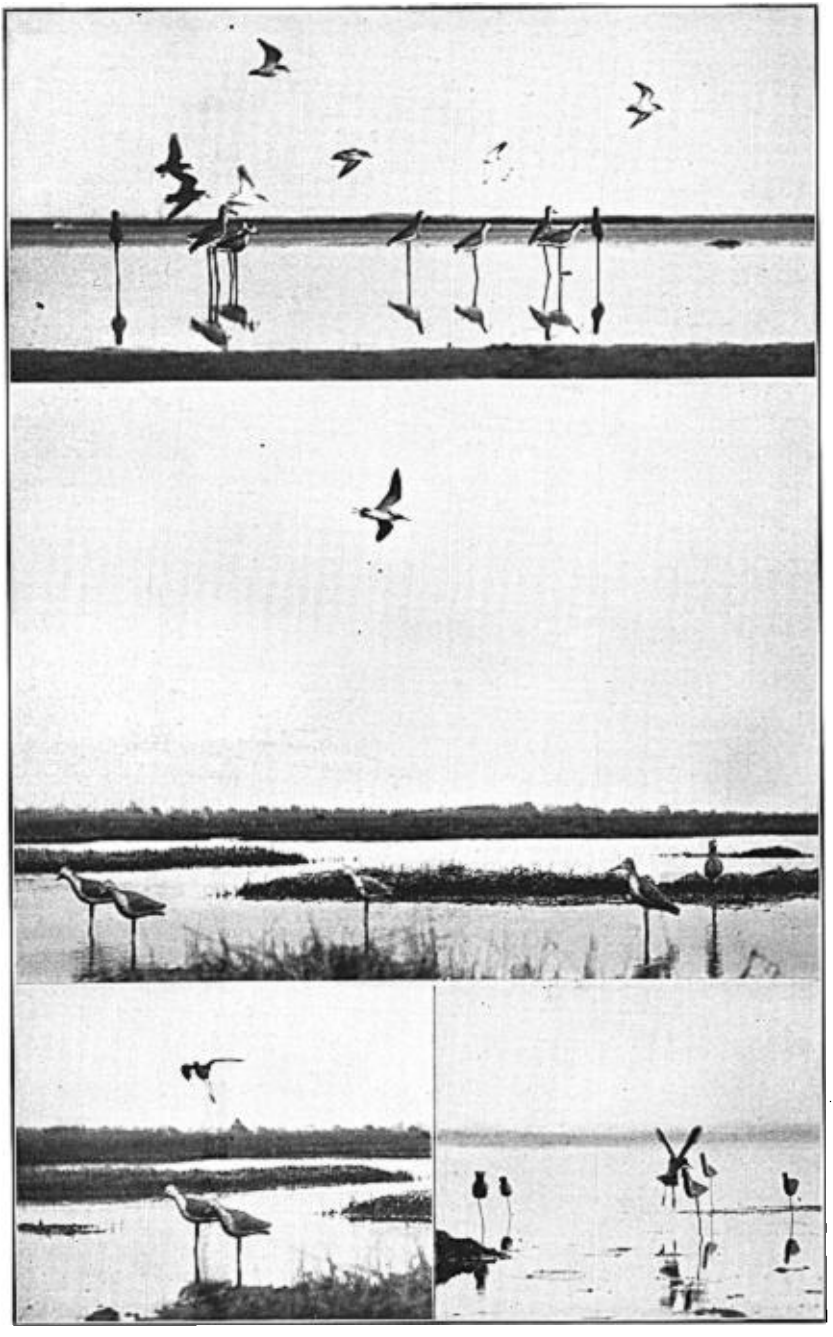
The bold white stripe running lengthwise through the middle of the blackish wing is conspicuous in a steadily flying bird, and serves to distinguish the species in any of the varying seasonal plumages.

Totanus melanoleucus. GREATER YELLOWLEGS; BIG YELLOWLEG; WINTER YELLOWLEG; YELPER.— With the exception of a few weeks in June and early July, the Greater Yellowlegs is present on these shores from April to November, or approximately half of each year. It is common on both the spring and the fall migrations, reaching its maximum numbers in the middle of May and in early September. Some exceptionally early spring records are March 9 (Eaton) and March 23, 1903 (Montauk, Braislin), the average date of arrival being about the middle of April. The birds frequently linger into June; several were noted as late as June 17 and 18, 1911, at Gardiner's Island (Harper), while Latham mentions June 19 as the latest date at Orient, and Eaton gives a record for June 22. The earliest date of arrival on the southward flight is July 3 (Orient, Latham), the average being about two weeks later. The latest fall records are November 24 (Eaton) and November 28, 1904 (Mt. Sinai, Murphy); usually the last birds are seen early in the month.

This species is one that has fairly held its own on Long Island in recent years, in spite of relentless persecution. As far as one can judge from shooting records, it was scarcely more numerous in the eighties than to-day. And the birds are still commonly observed in flocks of nearly the same size as in the time of Giraud, who wrote, 'They do not usually associate in large flocks, generally roving about in parties of from five to twelve.' It is largely by reason of their great watchfulness and wariness that they have survived in their present numbers. Doubtless another factor in their preservation is a habit exhibited by the members of a flock while coming in to decoys; they generally keep well separated, and thus do not expose themselves so fully to wholesale slaughter as do birds that bunch closely.

The favorite feeding ground of the Greater Yellowlegs is a large pool in the salt marshes (such as shown in Plate IX), where it generally alights and feeds in one or more inches of water. It is found less commonly along the mud-flats bordering the tidal channels, and only rarely upon the outer beach.

As a flock courses easily but swiftly above the marsh in orderly array, seeking some new haunt, its members frequently give voice to their loud, ringing whistles: *wheu-wheu-wheu,* or *wheu-wheu-wheu, wheu-wheu,* in series of three or more notes. The hunter in his blind gives a whistled imitation of the far-reaching sound, and eagerly scans the air for a glimpse of the oncoming birds. They fly up the wind, responding now and then to his call, and presently catch sight of the stool. If the collection of tin



1. "OXEYES" OVER DECOYS. 2, 3, 4. GREATER YELLOWLEGS.

or wooden birds is well placed, and the hunter resists the temptation to make any movement behind his screen of bushes, the gregarious instinct of the Yellowlegs may overcome their well-founded suspicions and induce them to join their supposed comrades. Upon such an occasion, to fill one's gaze with the large, graceful snipe, as they come low over the marsh, set their long, curving wings, and drop with dangling legs into the pool near the farthest decoys, keeping their wings lifted high over their backs for a moment after alighting, is one of the most fascinating and thrilling experiences to be had on the Long Island marshes. And if the instrument that the hunter then trains upon his game is capable of no louder noise than the click of a shutter, so much the richer is his reward.

When in flocks, the Greater Yellowlegs do not associate closely with other species, and keep to themselves even when feeding in the same pool with a variety of shore birds. We have, however, noticed single birds in the company of other large snipe, such as the Lesser Yellowlegs and the Dowitcher.

Though, as we have already suggested, this species occurs usually in bands of less than ten individuals, we had a flock of about 30 birds under observation for a number of hours on May 20 and 21, 1911, at the well-known Oak Island pool. When we approached the place, numerous Oxeyes merely moved to the farther side of the pool; half a dozen Black-bellied Plovers departed at once, and perhaps for good; the Yellowlegs, too, took flight, but after our blinds were built, they returned again and again, no matter how often disturbed. The pool contained, at that time, only an inch or two of water, and the Yellowlegs continually ran back and forth over the middle of it in an odd fashion. In spite of the extreme length and thinness of their legs, their movements were by no means ungainly. It can only be conjectured that these maneuvers were undertaken for the purpose of securing food, for now and then a bird would dart its bill into the water, as if to snatch up some small inhabitant of the pool, such as a fleeing killifish.

The Greater Yellowlegs is possessed of a varied vocabulary, which seems to have been slighted by most ornithological writers. Its principal notes consist of three very different kinds, all of which may be heard from a single bird in the space of only a few minutes.

A second note is less often heard than the usually described whistle; it seems to be used as a 'summons' call, as when birds on the ground call down a passing flock. It is a very pleasant and musical note, and oft-repeated — *tó-whee, tó-whee, tó-whee, tó-whee, tó-whee.* Hunters may use it to good effect in calling the birds to decoys. Some of them refer to this note as the 'roll'.

A third call is nothing short of astonishing to one who hears it for the first time. It is a curious, discordant cackle, or yelp, which probably gives rise to the vernacular name of 'Yelper.' A solitary Yellowlegs, alighting in a pool beyond the decoys, and entertaining strong suspicions of the blind, though not sufficiently alarmed to depart at once, is very apt to indulge in

this emphatic, henlike cackle: *kaouw, kaouw, kaouw, kaouw.* With each yelp it bobs its head vigorously.

Indeed, there are few of our shore birds that give such striking exhibitions of head-bobbing. The Yellowlegs may express its first mild suspicions by silent bobbing, but presently utters either its piercing whistle or its cackling yelp with the forward thrust of the head, lending so much energy to the movement that its whole body tilts with each bob. One can not help smiling at the bird's comical appearance. As its alarm grows, it bobs with increasing frequency, and finally springs into the air, redoubling its cries as it goes.

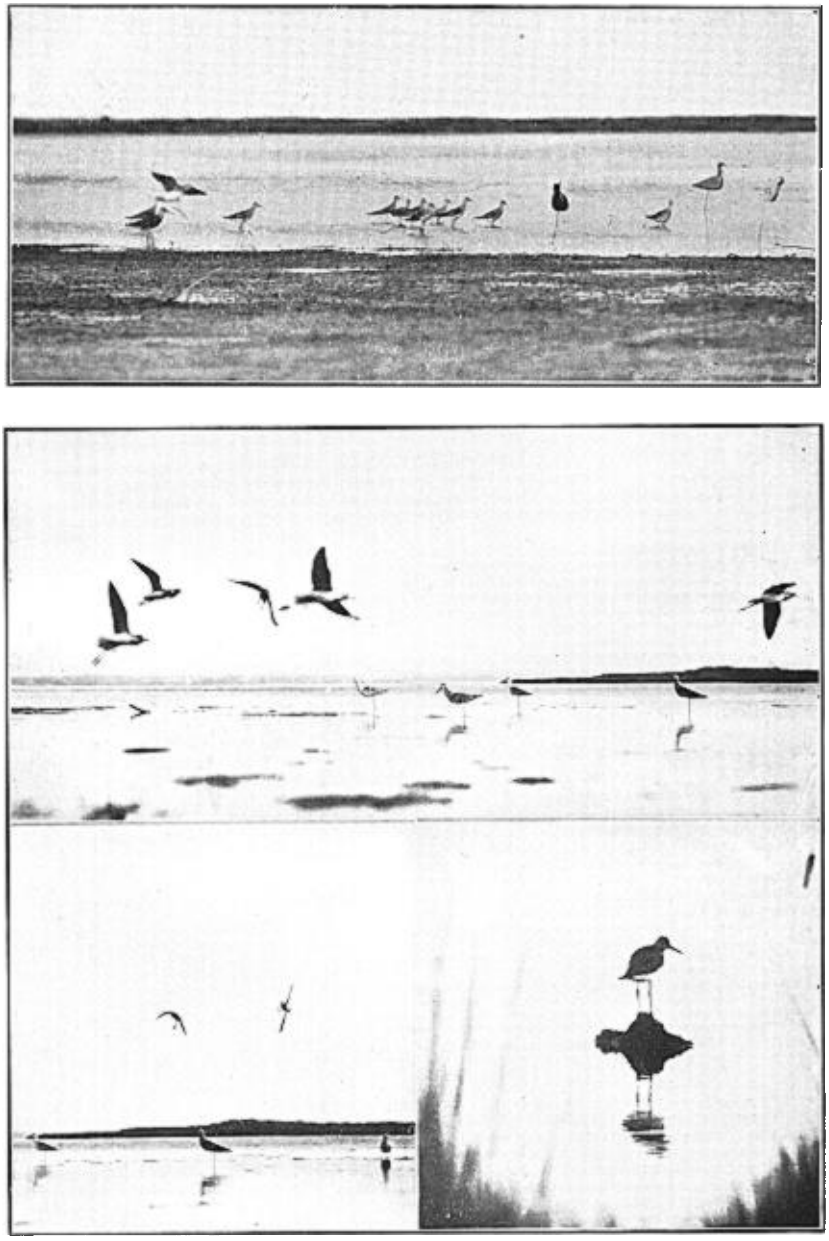
The dark upper parts, whitish tail-coverts and tail, and yellow legs are conspicuous marks which this species shares equally with the Lesser Yellowlegs. The bill of the Greater Yellowlegs is noticeably larger, but either species may be distinguished in the field more readily by its notes than by size.

Totanus flavipes. YELLOWLEGS; LITTLE YELLOWLEG; SUMMER YELLOWLEG; LESSER YELLOWLEGS.— Rare in spring, but a very common fall migrant, generally outnumbering the Greater Yellowlegs from the middle of July to the middle of September. Recorded from April 23 (Orient, Latham) to June 1 (Rockaway, Braislin), and from July 7 (Eaton) to October 28, 1912 (East Hampton, W. Helmuth).

The Lesser Yellowlegs frequents the shallow pools in the salt marshes, and is seen now and then on the mud-flats or on stranded layers of eel-grass along the shores of coves and bays. It is also very partial to brackish meadows with standing water; at such a favorable spot, on the inner beach opposite Mastic, 50 to 100 birds kept congregating for days near the end of August, 1913, despite persecution by gunners.

It is a very gregarious bird, and pairs or small flocks are more frequently observed than solitary individuals. It often associates with other species, such as the Dowitcher, Robin Snipe, and Greater Yellowlegs. In comparison with the last-named species, it generally travels in larger bodies, and is much less suspicious, stooling more readily and alighting closer to the blind. Its flight is similar, though perhaps not quite so strong as that of the larger bird, which at times covers distance with surprising speed. In all its movements and attitudes — whether wading among the decoys in water up to its thighs, bathing, running about over a mud-bar, standing at rest with neck drawn in, scratching its bill with a foot, or curving its slender wings in easy flight — the Lesser Yellowlegs is an exceedingly graceful bird.

In coming to the decoys, it may fly low and easily, or shoot down from a height; sometimes it whistles, and again it drops in without a sound. When the stool are planted on extra long sticks in deep water, the Yellowlegs will often flutter from one to the other, dipping its feet into the water without being able to alight. The bird shown in Plate XII, fig. 4, acted in such a manner until it happened to spy a little mud-lump, upon which it settled, about 16 feet from our blind. From this vantage-point it looked



LESSER YELLOWLEGS.

out over the stool, disregarding the blind and its occupants. Presently a Greater Yellowlegs passed by, and our bird followed it to a neighboring mud-flat. But after an interval of some twenty minutes, apparently the same Yellowlegs returned, and again perched on its favorite mud-lump. When we had secured a number of photographs, we tried to induce the bird to take wing, but the noises and movements we made were unavailing until it slipped off the lump by accident, and then departed.

The ordinary whistle of this species resembles that of the Greater Yellowlegs, but is not quite so loud and clear. It is given in a series of two or singly, *wheu-wheu* or *wheu* — seldom in a series of three or more, as is the larger bird's call. Flocking birds utter a short *wip*, which is frequently repeated, and sometimes runs into a series. There is also a musical 'summons' call, *toó-whee, toó-whee, toó-whee*, almost identical with that of the Greater Yellowlegs, but apparently not so loud. Once a flock of about a dozen birds, just after passing high over our blind, let loose a succession of these notes, as if to entice their inanimate counterparts on the marsh to join them.

In their feeding habits and choice of haunts, the two species of Yellowlegs are very much alike. So far as we have observed, they do not drill in the mud or sand in the manner of a Krieker, Oxeye, or Sanderling, but deftly snatch up their food with thrusts of their long bills, or occasionally search out small morsels by swinging their bills from side to side through shallow water.

Squatarola squatarola. BLACK-BELLIED PLOVER; BLACKBREAST; BULLHEAD (juv.).—Though no longer occurring in the abundance of former days, this strikingly handsome plover is still a rather common transient on Long Island. The migration records extend from April 30, 1902 (Montauk, Scott), to June 17 (Rockaway, Braislin), and from July 1, 1903 (Quogue, Kobbe), to November 12, 1911 (Jones Beach, Griscom). It is usually present on the southward migration from the first week of August to the middle of October, the bulk of the flight taking place in late August and September. Most of the spring birds are seen from the middle to the latter part of May.

The Blackbreast seeks its food at low tide on the mud-flats and the sandy beaches, where it may be distinguished from afar among the Turnstones, Ringnecks, and Sanderlings, that share with it these habitats. With each turn of the tide the plovers fly about more actively, passing to and fro between their feeding grounds and the higher and drier portions of the marshes and shoals, where they remain rather quietly during the period of high water. At times they also alight on the wet marsh.

Nowadays on Long Island they travel generally in small bands of three or four to a dozen individuals; we have, however, observed a flock of as many as 150 near Freeport on the spring migration, and Mr. Henry Thurston reports a flock of about 800 in the same locality on May 30, 1913.

As a rule, other species of shore birds, as well as decoys, have no great attraction for these wary and self-sufficient plovers. A common sight,

however, is a number of Turnstones keeping some Blackbreasts company, and following them when the larger birds fly off. We have observed Robin Snipe, too, associating with them. When one approaches a feeding ground where several different species of the commoner shore birds are present, the Blackbreasts can generally be depended upon to take flight first and farthest from the intruder.

They do not wade in the water so habitually as they run leisurely over the bare flats. On August 24, 1912, however, a pair took us unawares by alighting in a couple of inches of water among our decoys at East Pond, Hicks Beach. One of the birds was changing to winter plumage, but the other was still in nearly full summer dress. They displayed only a little uneasiness while so close to the blind, and though taking their departure after a few moments, they settled again on a mud-bar 50 yards away, where they permitted several long-range photographs from an unconcealed position. The black axillars, which will distinguish this species in any plumage from the Golden Plover, were caught by the camera as one of the birds raised its wings to the fullest extent (Plate XIII).

During this same month, while standing on the open marsh near Freeport, we answered the call of an adult Blackbelly that came flying in our direction. As if recognizing at that instant the dangerous objects ahead, it shot suddenly downward, swerving sharply from its line of flight, somewhat in the manner of a frightened Oxeye. Nevertheless it circled round and round us for the better part of a minute, continually responding to whistled imitations of its melodious notes. It often exhibits this habit of circling when the sportsman in a blind endeavors to lure it within range. Like the Ringneck, it is apt to hover for a moment over the stool in passing by. It is strong and swift on the wing, and its flight is steadier than that of most of our shore birds.

The Blackbelly's trisyllabic whistle, *peé-oooo-eee*, is uttered when the bird is either on the wing or on the ground, and may be heard from afar. It seems perfectly expressive of the bird's wildness and freedom, and is altogether one of the finest sounds of the Long Island coast. The first note, when heard close at hand, has a peculiarly shrill and buzzing quality, but this quality is greatly mellowed by distance. There can be little doubt that the chief accent falls upon this note, though some writers place it upon the second, which is the most prolonged of the three notes. The second and third syllables are nearly alike in tone, and the transition from the one to the other is not at all marked, so that the final syllable now and then appears to be omitted. Another whistle, not quite so frequently heard, is a mellow *kloo-ooo*, or *koo-wee*, with perhaps a slight accent on the second syllable. It seems to be a call of contentment or sociability, and is commonly uttered on a flight of short duration. On several occasions we have heard a small party of these plovers, before or while taking wing, utter a few low, guttural notes, quite unlike their usual whistles; they seemed to be given as calls of attention or warning.

Ægialitis semipalmata. SEMIPALMATED PLOVER; RINGNECK.—

The Ringneck, one of the most daintily dressed and most charming of the Long Island shore birds, is also one of our most familiar species, being exceeded in numbers only by the Least and Semipalmated Sandpipers. A regular and very common migrant, it is present usually throughout most of the month of May, and from late July to the first week in October. Extreme dates for the spring migration are April 19 and June 5 (Eaton); for the fall migration, July 6 (Orient, Latham) and October 22, 1912 (East Hampton, W. Helmuth). On the southward flight it does not become common before the first week in August, when flocks of considerable size may be seen.

This is essentially a bird of the mud-flats, just as the Piping Plover is a bird of the sandy outer beaches. And here is an interesting correlation between plumage and habitat in two closely allied species, the Ringneck's brown back harmonizing with the dark color of the mud, while the Piping Plover's pale plumage renders it inconspicuous on the bright sands. The Ringneck is not given to wading, but feeds along the borders of quiet tidal channels, on the bars and margins of pools in the salt marshes, as well as on the drier, stubbly portions of the marshes, and even occasionally on the outer beach.

It associates freely with the two common species of Oxeyes, one or more of the plovers often being seen in a flock of these small snipe; it is also found commonly in the company of the larger shore birds. At other times, it travels in separate bands of three or four to twenty-five or thirty individuals. The members of a flock scatter somewhat in feeding, but on taking wing, they gather into close ranks, their bright under parts showing conspicuously as the flock wheels over the marsh.

The Ringneck is not very wild, nor yet as trustful as an Oxeye, but, on the whole, it much prefers to keep a fair distance between itself and a human being. At nightfall, however, it sometimes permits a close approach, as it runs restlessly about the shore and gives its piping notes. Generally, at the appearance of an intruder, or on other occasions when its suspicions are aroused, it bobs its head in a mildly inquiring way. Decoys do not have the same attraction for this bird as for a Yellowlegs or an Oxeye. When it does come to stool, it may hover for a moment, or even alight, but usually passes by without stopping. Perhaps this is accounted for, in part, by the fact that the decoys in most cases are set out in several inches of water, and the Ringneck therefore finds no suitable place for alighting near them.

Its flight is strong and direct — much less erratic or meandering than that of an Oxeye. Its movements on the ground are not very rapid, and suggest somewhat those of a Robin; it stands quietly on a mud-bar, facing the wind, its head bent slightly forward with an intent air, then it trots forward a few steps, and stops to look about again for a morsel of food. Its legs do not seem to move with the twinkling rapidity of a Piping Plover's, for the mud-flats are less suitable for fast traveling than are the smooth sands over which the latter habitually runs.

The Ringneck's ordinary flight-note or call-note is a sweet and mellow whistle, *tyoo-eep'*. It is given repeatedly by birds on the wing, but those on the ground are generally silent when not disturbed. From hearing this whistle while spending the night on the marshes, we surmise that the birds are more or less active during the hours of darkness. Another and rougher note seems to signify excitement or suspicion; it is usually uttered singly, but sometimes a bird standing on the ground will give a rapid descendo series of these questioning notes, *keup-keup-keup-keup*, etc., the last few almost running together.

EXPLANATION OF PLATES.

PLATE VII.

FIG. 1. Blind and decoys at a pool on the outer beach — the Sanderling's haunt. Long Beach, L. I. September 19, 1909. (F. H.)

FIG. 2. Sanderling tracks. Fire Island Inlet, L. I. May 29, 1911. (F. H.)

FIG. 3. Sanderlings on the outer beach. Mastic, L. I. September 15, 1913. (J. T. N.)

FIG. 4. Sanderling on the inner beach. (Note the bill open only at the tip.) Short Beach, L. I. August 14, 1910. (F. H.)

PLATE VIII.

FIGS. 1, 2. Northern Phalarope. Long Cove, Great South Bay, L. I. April 2, 1911. (Photographed by Frank Overton, M. D.)

FIG. 3. Dowitcher and Oxeye. Mastic, L. I. August 17, 1913. (J. T. N.)

PLATE IX.

FIG. 1. Snipe blind and decoys at a pool on the salt marshes. Freeport, L. I. May 15, 1910. (F. H.)

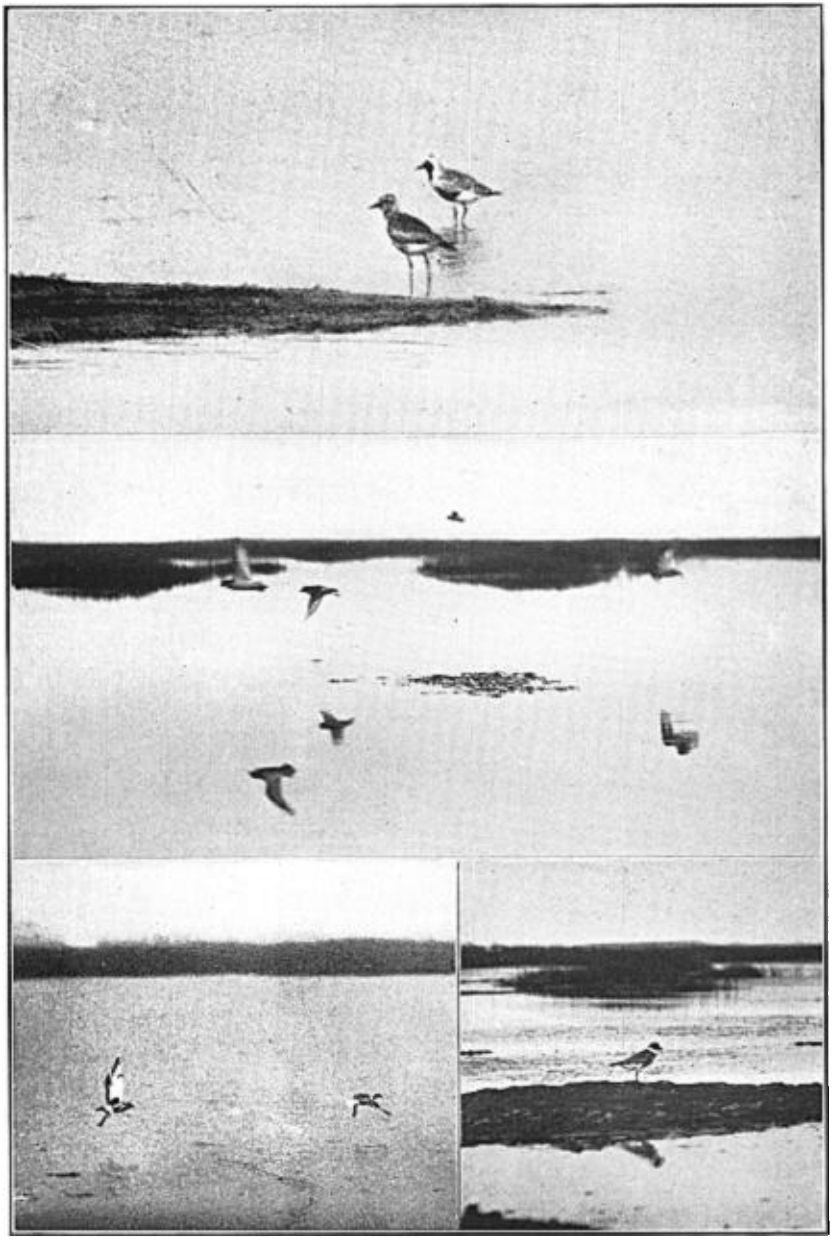
FIG. 2. White-rumped Sandpiper. East Pond, Hicks Beach, L. I. October 22, 1911. (J. T. N.)

FIG. 3. Pectoral Sandpiper. Mastic, L. I. August 24, 1912. (J. T. N.)

FIG. 4. Least Sandpipers in concealing postures; one bird squatting. Mastic, L. I. September 1, 1912. (F. H.)

PLATE X.

FIG. 1. Semipalmated Sandpipers. Jones Beach, L. I. May 25, 1913. (J. T. N.)



1, 3. BLACK-BELLIED PLOVERS. 2, 4. SEMIPALMATED PLOVERS.

FIG. 2. Least Sandpipers (on left) and Semipalmated Sandpipers (on right). East Pond, Hicks Beach, L. I. September 8, 1912. (F. H.)

FIG. 3. Semipalmated Sandpipers (and probably other species) rising from a mud-flat. Gilgo Flats, Jones Beach, L. I. July 28, 1912. (F. H.)

PLATE XI.

FIG. 1. Oxeyes passing over decoys. Gilgo Flats, Jones Beach, L. I. September 4, 1911. (F. H.)

FIG. 2. Greater Yellowlegs wheeling over decoys. Freeport, L. I. May 15, 1910. (F. H.)

FIG. 3. Greater Yellowlegs coming in to decoys. Freeport, L. I. May 15, 1910. (F. H.)

FIG. 4. Greater Yellowlegs hovering among decoys, with legs dangling, but unable to alight in deep water. Mastic, L. I. September 13, 1915. (F. H.)

PLATE XII.

Lesser Yellowlegs. Mastic, L. I.

FIG. 1. Flock alighted among decoys. Late July, 1913. (J. T. N.)

FIG. 2. Flock passing over decoys. September 11, 1915. (F. H.)

FIG. 3. Two birds dropping in. (In wheeling sharply, one has turned almost over.) September 11, 1915. (F. H.)

FIG. 4. Single bird standing on mud-lump near decoys. September 1, 1912. (F. H.)

PLATE XIII.

FIGS. 1, 3. Black-bellied Plovers. (Note the black axillars showing in one of the flying birds.) East Pond, Hicks Beach, L. I. August 24, 1912. (F. H.)

FIGS. 2, 4. Semipalmated Plovers in front of blind at a pool on the salt marshes. Freeport, L. I. August 21 and 20, 1910. (F. H.)