

NOTES ON UNUSUAL MASSACHUSETTS SHOREBIRDS

by Wayne R. Petersen, Abington

For over a century, sportsmen, market gunners and naturalists have known Massachusetts as a prime area in which to hunt or observe shorebirds. The state's extensive tidal estuaries, barrier beaches, vast salt meadows and barren offshore islands all provide ideal habitat for hordes of spring and fall transient waders. For some species, Massachusetts serves as a staging area for long, over-water flights to South America, or as a final stop-over point prior to making inland flights to the Canadian Arctic in the spring. Counts of individual species during the peaks of migration in late May and early August often reach into the thousands, or even tens of thousands. An aggregate species count at a favored area such as Newburyport or Monomoy can run as high as 25,000+ shorebirds in a single day!

With such a volume of birds using Massachusetts as a feeding and resting area, and considering the shorebirds' potential for wandering by virtue of their long-distance flight capabilities, it is little wonder that a remarkable variety of rare and unusual shorebird records have been amassed in Massachusetts since 1900. The origin of many of these vagrants is a matter for pure conjecture, but in certain cases the records are numerous enough to fall into a meaningful pattern. Records of this second type relate to 1) storm-carried birds, 2) spring migrational overshoot from more southerly breeding grounds, or 3) part of a range extension or population shift.

The following annotated listing reviews the status and pattern of occurrence of fourteen species of rare or unusual shorebirds in Massachusetts. Excluded from this listing are records of rare or geographically improbable shorebird subspecies. In most cases these forms require the collection of a specimen for positive subspecific determination. This point is borne out when it is noted that many of the early subspecies records were made by fortuitous or random collecting. For the record, however, species for which one or more unusual geographical races have been recorded in Massachusetts include the Piping Plover (Charadrius melodus), Whimbrel (Numenius phaeopus), Solitary Sandpiper (Tringa solitaria), Willet (Catoptrophorus semipalmatus), Dunlin (Calidris alpina), and Short-billed Dowitcher (Limnodromus griseus).

Annotated List

AMERICAN OYSTERCATCHER (Haematopus palliatus):

Formerly a summer resident in the state, the Oystercatcher was extirpated locally before the turn of the century. As recently as 1955, Griscom and Snyder termed the Oystercatcher "a rare vagrant from the south, chiefly but not exclusively after southerly storms." Prior to 1969 there were fewer than twenty-five records for Massachusetts.

By 1957, however, the Oystercatcher was again breeding as far north as Long Island, N.Y. Then, on June 29, 1969, Steven Schneider discovered nesting Oystercatchers on Chappaquiddick Island, M.V. In the years since that original discovery, the species has been known to nest on Monomoy, Nantucket, Tuckernuck Island and Muskeget Island, in addition to the original Martha's Vineyard location. Thus, the Oystercatcher clearly represents an example of a bird which is recolonizing a former breeding range.

WILSON'S PLOVER (Charadrius wilsonia):

This species is a rare vagrant from the south. Since 1900 there are fewer than twenty-five totally reliable records for Massachusetts. Because of its marked similarity to certain plumages of the Semipalmated Plover (Charadrius semipalmatus), many sight records have necessarily been rejected over the years.

The nearest breeding areas to Massachusetts are the mid-Atlantic states of Maryland and Virginia. However, the species has nested casually north to New Jersey. Since a number of our records are in late May, it is logical to think that these birds represent spring migrants which have over-shot their mid-Atlantic Coast breeding grounds. Most of the fall records coincide with tropical storms or hurricanes.

MOUNTAIN PLOVER (Charadrius montana):

The Mountain Plover is an accidental straggler from the high plains of the western United States. The only state record is of a bird collected by chance from a flock of Black-bellied Plovers (Pluvialis squatarola) by A. E. Crowell in Chatham on October 28, 1916. The specimen now rests at the Museum of Comparative Zoology in Cambridge.

LONG-BILLED CURLEW (Numenius americanus):

Prior to 1900 the Sickle-bill was probably a regular fall migrant to such favored areas as Cape Cod. Since then, however, it has become very rare in Massachusetts, with only ten records since the turn of the century. The most recent Massachusetts specimen is of a bird collected in Chatham on June 15, 1938 by Ludlow Griscom. The most recent sight records were in 1958.

All records but the one mentioned above are in August or September. This suggests that occasional fall stragglers wander from their established flight lines (to the southeastern coasts of the United States, where small numbers regularly winter).

ESKIMO CURLEW (Numenius borealis):

The status of the Eskimo Curlew is open to question at this point. Several alleged sightings in North America within the last twenty years may well be authentic, for a specimen was shot on September 4, 1963 on the island of Barbados in the West Indies. For most ornithologists, however, the species is virtually extinct.

At one time, the Dough-bird regularly passed Massachusetts on its pelagic migration to South America in the fall. Occasionally, great onshore flights would be recorded after severe easterly storms. However, the last Massachusetts specimen was taken on September 5, 1913 at East Orleans.

Several sight records in the last few years, while not fully convincing, should give the optimistic field observer something to watch for!

WANDERING TATTLER (Heteroscelus incanum):

An accidental straggler from the West Coast. The first and only Atlantic Coast record was of a bird in Alternate (breeding) plumage discovered by Wallace Bailey on May 25, 1968 at Monomoy Point. This individual remained until May 30 and was well observed and photographed by several competent observers during that period.

Its presence at Monomoy in late May is at best inexplicable, since the species rarely strays from the wave-washed rocks of the Pacific Coast.

SHARP-TAILED SANDPIPER (Calidris acuminata):

The occurrence of this species, an accidental straggler from Siberia and the northern Pacific Coast, in Massachusetts is most remarkable. It is interesting to note, however, that since 1967 six records have been established along the Atlantic Coast, with two of these being from Massachusetts! The species has also been recorded in England.

The first record for this state was made when Karsten Hartel found an adult in Alternate (breeding) plumage on Plymouth Beach on June 30, 1971. The bird was successfully collected the same day by Joseph A. Hagar and is now at the Museum of Comparative Zoology.

The second state record was of an immature found in Newburyport by Richard Forster and Wayne Petersen on November 3, 1973. This bird remained through November 5, and the identification was amply confirmed by a number of skilled observers.

While the occurrence of the Sharp-tail here seems extraordinary, it is a species which bears such a close resemblance to the Pectoral Sandpiper (Calidris melanotos)

that it could easily be overlooked amid a flock of the commoner species.

CURLEW SANDPIPER (Calidris ferruginea):

This species, like the Ruff (Philomachus pugnax), is a rare but regular visitor to Massachusetts. It is at present breeding in northern Alaska, and no doubt other Nearctic nesting grounds will eventually be found. Since it is essentially a north-eastern Palearctic species, its origins here are of interest. Several theories have been put forth to explain its regularity in the northeastern United States:

- 1) Nisbet (1959) has suggested that because of heavy east-west migrations in Europe of species like the Curlew Sandpiper and the Ruff, it is not unrealistic to think that a small percentage may regularly over-shoot and find themselves on the northeastern coasts of the New World.
- 2) Eisenmann (1960) holds that these same species may be transported across the tropical Atlantic by storms while en route to Africa during their fall migration. Their presence in the spring in the Northeast would then be explained by their having followed other shorebirds north during the spring migration.

- 3) Bull (1964) points out that some Curlew Sandpipers may follow a migration route similar to that followed by the Long-billed Dowitcher (Limnodromus scolopaceus) or the Western Sandpiper (Calidris mauri), both of which breed in Alaska and move southeastward in the fall.

In any case, the first Massachusetts specimen was taken in 1865, with only five additional records until 1940, when Ludlow Griscom collected a specimen at Monomoy on August 4th. Since that time, records have been almost annual, with late May and early June being one of the most frequent periods of occurrence. In Basic (winter) plumage, this species can more readily pass undetected.

BAR-TAILED GODWIT (Limosa lapponica):

An accidental straggler from Europe, this species has appeared four times in Massachusetts. The first record is that of a bird shot on Cape Cod and found in the Boston market on September 17, 1907. The second North American specimen was collected at Nauset on July 26, 1937, by James L. Peters and Joseph A. Hagar.

More recently, a Bar-tail was on Martha's Vineyard from August 27-31, 1968, and was observed and photographed by Manning Sears. Another bird was present on North Beach, Chatham from September 9 to September 16, 1972. This bird was first discovered by Robert V. Clem and was seen by many observers and photographed (American Birds, 27:26).

When sitting, this species is not at all distinctive, and conscientious observers should look closely at all flocks of Hudsonian Godwits (Limosa haemastica). Check especially any out-of-season individuals.

BLACK-TAILED GODWIT (Limosa limosa):

An accidental straggler from Europe. The first United States record (and only the second for North America) was a bird in partial Alternate (breeding) plumage, discovered by Gilbert and Jo Fernandez on April 22, 1967, in Dartmouth. Initially this bird was thought to be a Hudsonian Godwit, but James Baird clinched the identification by noting the prominent white wing linings as the bird flew. It remained for eight days and was well photographed.

Since this 1967 record, at least one additional sighting has been made on the Atlantic Coast of North America.

RUFF (Philomachus pugnax):

A rare but increasingly regular visitor to Massachusetts. The occurrence of the Ruff in this state and in North America is roughly parallel to the situation described for the Curlew Sandpiper, although Ruffs tend to appear more frequently. This is essentially a Palearctic species, but, unlike the Curlew Sandpiper, has not yet been proved to nest in North America. A breeding record for North America can be confidently expected.

The first state specimen was taken in 1871, and since the mid-1940s the species has been of more or less annual occurrence. It often arrives in mid-April and can be expected most often in mid-May, July and early August. Fall occurrences are more uncommon. Rufus usually travel with yellowlegs and seem to prefer grassy mudflats or flooded, shortgrass meadows.

AMERICAN AVOCET (Recurvirostra americana):

A casual visitor from the West, perhaps becoming more regular within the last ten years. The first twentieth century record was of a bird found on Martha's Vineyard by Mrs. Alfred Edey on September 20, 1933. Since 1964 the species has been seen almost annually in Massachusetts.

The Avocet is present in ever-increasing numbers in mid- to late summer on Cape Hatteras, and since 1954 it has ranged northward regularly to southern New Jersey. Massachusetts records are in the period from May through November. It is possible that the Avocet may eventually reestablish itself as a breeding bird on the mid-Atlantic coast, where, according to Stone (1937), it nested in the early 1800s.

BLACK-NECKED STILT (Himantopus mexicanus):

A rare vagrant from the south. Since 1900 the Stilt has been recorded in Massachusetts only six times. The first of these records dates back to 1901, when a specimen from Lynn found its way to the Museum of Comparative Zoology in Cambridge. Then, in 1953 and again in 1954 two birds (each year) showed up at Plum Island and Martha's Vineyard. These birds may have originated from an egg transplant experiment conducted along the New Jersey coast in the spring of 1952. In this experiment, Black-necked Stilt eggs from further south were hatched under Willets (Catoptrophorus semipalmatus) breeding on the Jersey shore.

The three most recent records are as follows:

October 19-25, 1969	Ipswich	Stella Garrett, et al
June 7, 1970	Newburyport	Wayne Petersen, et al
May 26-June 6, 1972	Plum Island	Richard Forster, et al

Since this species was found breeding as far north as Delaware in 1970, perhaps we can expect more Stilts in years to come, especially since it nested north to New Jersey in the early 1800s.

WILSON'S PHALAROPE (Steganopus tricolor):

Wilson's Phalarope is a rare to very uncommon spring and fall transient from the west. Since 1928, and more especially in the last twenty years, it has been recorded almost annually.

Wilson's Phalarope occurs most regularly in August and early September. However, in recent years, May and early June occurrences have not been uncommon. Rarely, as many as a dozen or more may be seen together; and one extraordinarily late individual was observed on November 24, 1966 at Plum Island by Wayne Petersen, et al. The species prefers shallow pools or grassy mudflats for feeding.

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"EAGLE-EYE"

Any birder would like to have an "eagle-eye." But how good is an eagle's vision? Traditionally, it is much superior to a human's; also, laboratory estimates have indicated that a hawk's retina contains up to seven times as many cones (bright-light receptors) as a human retina, a fact that also implies extraordinary acuity.

However, the quality of an optical system depends not only on the resolving power of its light receptors but also on the size of the aperture. To achieve full utilization of its sensor resolution, a hawk's eye would have to have a pupil diameter of at least 18.4 millimeters (2/3 inch)!

In testing ophthalmoscopically an African Serpent Eagle Dryotriorchis spectabilis, whose pupil diameter remained between 6.0 and 6.5 millimeters, Robert Shlaer of the University of Rochester and the University of Chicago concluded that "the visual system of the eagle under test may be capable of from 2.0 to 2.4 times human resolution. On the basis of size [direct scaling] the Golden Eagle Aquila chrysaetos might reach 2.4 to 2.9 times, and the Martial Eagle Spizaetus bellicosus ... 3.0 to 3.6 times human visual acuity." These are minimum values, and actual performance may be somewhat better.

Furthermore, Dr. Shlaer notes (Nature, Vol. 176, page 920) that eagles have particular ability to detect objects against a blue (sky) background. But the small size of an eagle's cones means that their performance as light receptors falls off rapidly as the illumination decreases.

It would be interesting to read of similar experiments with members of such families as owls (night feeding) and nightjars (twilight and night).

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BEHAVIORAL NOTE ABOUT STARLINGS

On March 9, 1974, at 10:30 a.m. EDT, we were watching various birds feeding in our backyard near an Arbor Vitae about 30 feet away. A pair of Starlings began to squabble, and after about a second one of the birds fell on its side, though we did not see it struck by the other bird. It remained thus for a total of perhaps 10 seconds. At first, we thought the bird was dead, but after about five seconds it moved its head slightly. Meanwhile, the other Starling stood behind and within a few inches of the fallen bird, apparently watching but making no aggressive gesture.

Then a disturbance occurred, and the mixed flock flew away. About a second later, the Starling on the ground rose quickly and flew off after the other birds in a perfectly normal manner. Overall, the behavior of this bird seemed to evidence an act of "playing possum."

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