WHY WAS IT A COX'S SANDPIPER?

by Richard A. Forster

Certainly one of the most phenomenal occurrences in Massachusetts' ornithological history, if not in all of North America, was the presence of a Cox's Sandpiper at Duxbury Beach, Plymouth County, September 15-22, 1987. The species *Calidris paramelanotos* was described as recently as 1982 and is known only from about twenty-five sight records and two specimens, all from southeastern Australia. Given the brief history of the species, its appearance in Massachusetts seems impossible.

The scenario opened with a routine shorebird netting conducted by Manomet Bird Observatory (MBO) on the evening of Tuesday the fifteenth. There was an exceptionally good catch of Semipalmated Sandpipers (*C. pusilla*), the primary target, with several incidental individuals including a bird tentatively identified as a Pectoral Sandpiper (*C. melanotos*). After the banding was completed (3:00 A.M.), this bird was photographed and released.

A careful study of the photos prompted Mark Kasprzyk to phone me Thursday afternoon. He said he thought the bird identified as a Pectoral was more likely a Sharp-tailed Sandpiper (*C. acuminata*). He urged me to go to Duxbury beach with him, but due to the lateness of the hour (3:30 P.M.), I decided to wait till morning. Mark, however, visited the beach that evening, relocated the bird, and recorded detailed notes during a leisurely viewing.

About 10:45 A.M. the following morning, Mark and I arrived at Duxbury Beach accompanied by Jon Atwood and Trevor Lloyd-Evans of Manomet Bird Observatory and by Carol E. Seeckts. There was a moderate wind and intermittent light rain. Almost immediately after our arrival, we located the bird feeding with numerous other shorebirds of various species along the high-tide wrack line. From our position, under the existing weather conditions, the bird in question did not look like a Pectoral but seemed to be a Sharp-tailed. During the next quarter hour, we approached the sandpiper, flushing the foraging shorebirds several times. Each time the birds flushed they returned shortly thereafter to the same area and resumed feeding. Each closer study of the bird confirmed some field marks inconsistent with the identification of Pectoral Sandpiper. But it could not be considered a juvenile Sharp-tailed because it lacked the bright rufous crown, prominent supercilium, and buffy breast nearly devoid of streaks. It had an inordinately long black bill that was slightly decurved at the tip. The legs were distinctly greenish yellow or olive and seemed slightly longer than in a typical Pectoral. The breast was a rather bright buff with fine vertical streakings somewhat resembling that of a Baird's Sandpiper (C. bairdii). The mantle and scapular feathers were dark, edged with rufous, but the wing coverts were a much paler gray or gray-brown without rufous edgings. The supercilium was present but not prominent and at some angles appeared distinctly split or forked. By default, we then concluded that it must be an **adult Sharp-tailed Sandpiper** in a plumage stage transitional between alternate and basic.

I spent that afternoon visiting areas in Scituate and Marshfield and the Cambridge Reservoir in Lexington looking for Pectorals to view for comparison but was unable to locate any. Upon arriving home that evening, I consulted the recently published book by J. Marchant, T. Prater, and P. Hayman (Shorebirds: An Identification Guide to the Waders of the World, 1986, Houghton Mifflin, Boston). Plate 82 in the book illustrates a variety of plumages for Pectoral and Sharp-tailed species and includes an illustration of Cox's Sandpiper. Comparing the illustrations with my recollection of the bird we had seen that day, I kept arriving at Cox's. The illustration that most convinced me is the one depicting the heads of the three species. It clearly shows the long, decurved, all black bill of Cox's Sandpiper. The text, especially the description of leg color, further strengthened my conviction about the bird's identity. The bird did not fit any description of Sharp-tailed or Pectoral Sandpiper. There seemed to be one character that would definitively identify the bird, namely, the bill length. Marchant et al. (1986) list the range of bill length for Pectoral as 24-32 mm and for Sharp-tailed as 22-28 mm. Bill length for Cox's Sandpiper was listed as 33-37 mm.

At this point I called Kasprzyk to find out what the bill had measured. Kasprzyk checked with the MBO records and called back with the measurement -- 35.1 mm -- well in the range for Cox's and beyond the maximum for both Sharp-tailed and Pectoral. All salient field marks were consistent with Cox's Sandpiper, and no other shorebird that I was familiar with possessed the combination of characteristics of the Duxbury bird.

Is the appearance of a Cox's Sandpiper in Massachusetts plausible? The answer, quite simply, is yes. This species is known to winter in southeastern Australia during the period of September to March, the same time frame as other common wintering species -- Red-necked Stint (*C. ruficollis*), Sharp-tailed, and Curlew Sandpiper (*C. ferruginea*). All of these leave Australia to breed on the Siberian tundra. Presumably Cox's does too. Both Red-necked Stint and Sharp-tailed Sandpiper have occurred as vagrants on the Massachusetts coast during southward migration. If they all share the same general breeding location and similar migration strategies, then why shouldn't a Cox's Sandpiper appear in Massachusetts? And now it has.

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The two photos printed here were taken September 21, 1987, on Duxbury Beach and document the first known example of the juvenile plumage of Cox's Sandpiper (Calidris paramelanotos). Despite the differences discernible from the photographs, this individual bears a considerable resemblance to a juvenile Pectoral Sandpiper (C. melanotos). Structural differences include a somewhat heavier build, slightly longer legs, and a longer, thinner bill. The bill also apppears (as it appeared in the field) entirely dark, showing no pale area at the base, as a Pectoral would. Plumage differences include less prominent "V" marks on the back and extensive gray bases to the lower scapulars. (For an excellent reference to feather groupings in Calidris sandpipers, see Veit and Jonsson, 1984, American Birds, 38: 854.) This character serves to offset the dark shaft streak and black subterminal portion of each of these feathers, thus creating an appearance distinctly different from that created by the darkcentered scapulars of a Pectoral Sandpiper (see cover sketch as well). Note, also, the size difference between the much larger Cox's and the nearby Semipalmated Sandpiper (C. pusilla). Photos by Simon Perkins.