

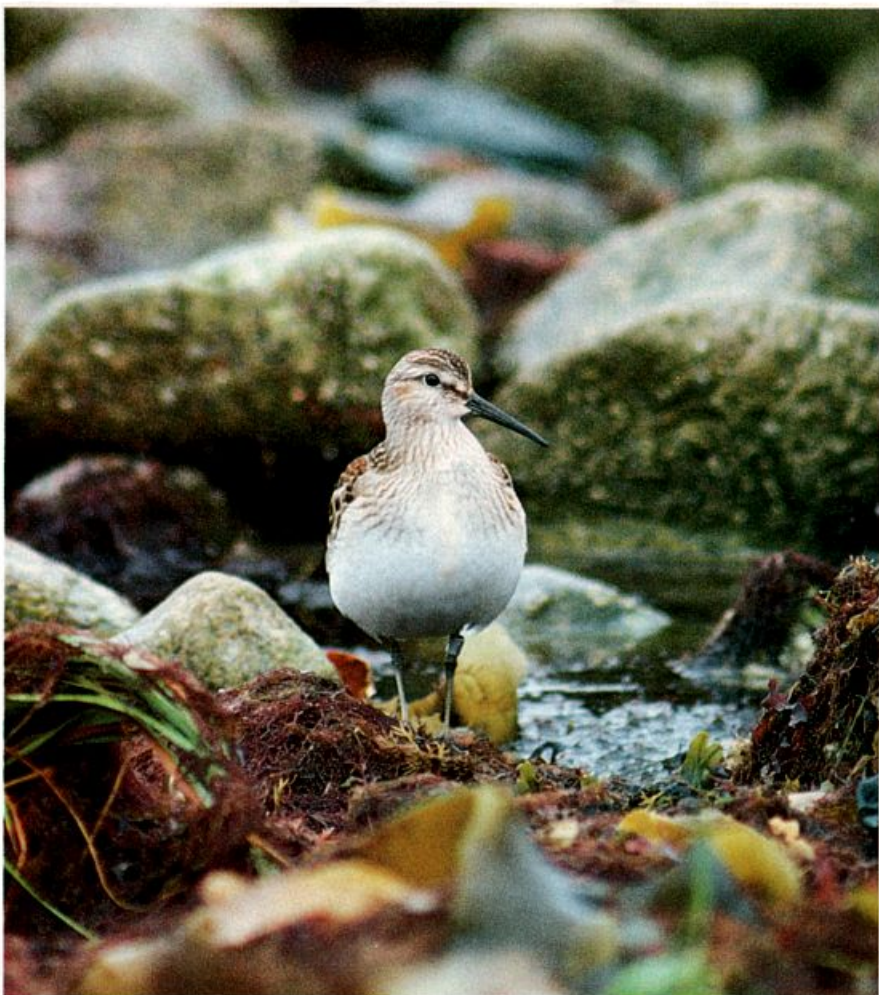
Juvenile Cox's Sandpiper (*Calidris paramelanotos*) in Massachusetts, a first New World occurrence and a hitherto undescribed plumage

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ON SEPTEMBER 21, 1987, AT DUXBURY BEACH in Plymouth, Massachusetts, we observed a juvenile shorebird which had been netted, measured, and banded on September 15, and photographed and released on September 16, by Mark Kasprzyk and other staff of Manomet Bird Observatory. It had been originally recorded as Pectoral Sandpiper (*C. melanotos*), and later thought to be an adult Sharp-tailed Sandpiper (*C. acuminata*), and it was this species we had come to Plymouth expecting to see. We were, therefore, surprised to encounter a wholly unfamiliar bird, a medium-sized, robust, brown juvenile *Calidris* with dull olive legs and a strikingly long, black bill, decurved and attenuated at the tip.

The bird was feeding in a flock containing Ruddy Turnstones (*Arenaria interpres*), Red Knots (*C. canutus*), Sanderlings (*C. alba*), Semipalmated Sandpipers (*C. pusilla*), White-rumped Sandpipers (*C. fuscicollis*), Pectoral Sandpipers (*C. melanotos*), and Dunlins (*C. alpina*). We observed it for about four hours at ranges down to five meters using two Questar telescopes (40–50 magnification), two 20-power spotting scopes, binoculars, and 300, 400 and 560 millimeter telephoto lenses on 35 millimeter cameras. The day was overcast with occasional light drizzle.

The crisp, bright and unworn feathers of the back and wings, lacking traces of any previous or ingrowing plumage, were clearly those of a juvenile. The length, shape and color of the bill sufficed to rule out juvenile Sharp-tailed Sandpiper as did the cold dark brown



Front view of Cox's Sandpiper showing the thinly streaked chest. Note the creamy patch down the center of the breast. Duxbury Beach, Massachusetts, September 21, 1987. Photo/Peter D. Vickery.



Cox's Sandpiper in crouch posture. The split supercilium, orange patch on the ear-coverts, buffy mantle "V," upper scapulars solidly blackish-brown with rufous edges are all visible. Note the black "anchor-shapes" in the upper row of lower scapulars. Duxbury Beach, Massachusetts, September 21, 1987. Photo/Bruce A. Sorrie.



This front view of the Cox's Sandpiper shows the thinly streaked dark brown crown. The foreneck and breast are buffy with thin dark brown streaks terminating on the lower breast. Note the uncrested creamy patch that extends down the center of the breast to the upper belly. Duxbury Beach, Massachusetts, September 21, 1987. Photo/Bruce A. Sorrie.

crown lacking rusty tones, the unmarked white undertail coverts, the thin streaks extending to the lower breast, and the buffy breast lacking bright rusty tones. While the bird bore a general resemblance to Pectoral Sandpiper, its bill was again too long, fine and black and the bird was different in several other particulars: the crown lacked any rusty tones, the demarcation between streaked breast and unstreaked belly was vaguely defined and interrupted centrally, and the median and lower row of lesser secondary coverts were pale gray with dull whitish fringes.

The bird did, however, conform closely in size and shape to descriptions of Cox's Sandpiper (*Calidris parame-lanotos*), a poorly known wader recently discovered in Australia (Parker 1982; Hayman *et al.* 1986).

DESCRIPTION

Head: Somewhat capped appearance, the forehead and crown dark brown faintly lined with dirty white, the hind crown faintly rusty. Supercilium whitish, thinly streaked with grayish-brown behind the eye and blending smoothly into the nape, which is thinly streaked grayish-brown and whitish. A narrow whitish lateral crown stripe creates an obvious split supercilium. Lores dark brown, eye-line thin and dark brown, extending to nape. Side of face below eye whitish with faint short brown streaks extending to sides of throat and foreneck. Ear-coverts faintly streaked dark brown with a blurry pale rusty patch below and behind eye.

Upperparts: Mantle feathers with dark brown centers and narrow buffy to dull rusty edges, the mantle with a pair of nearly convergent bright buffy lines in the form of a "V," this "V" sometimes appearing to be formed by two closely spaced pairs of lines. Lower back dark brown, prominently barred with rufous edges. Uppertail coverts dark brown in center, the sides white with a few dark brown streaks.

Inner two rows of upper scapulars blackish-brown edged bright rufous, creating a rusty zone in an otherwise brown-backed bird. The outer row of upper scapulars with pointed blackish-brown centers, gray bases, rusty lateral margins and the tips prominently white on the lower edge, forming a thin, broken white line. Anterior lower scapulars

pale gray with broadly anchor-shaped blackish-brown marks. Posterior lower scapulars more extensively blackish-brown with reduced gray bases. All lower scapulars with dull rusty margins and white tips. Lesser and median secondary coverts pale gray, slightly darker subterminally, tips and lateral edges dirty white, rachis black. Outer greater secondary coverts similar. Inner greater secondary coverts medium gray, darker subterminally, lateral edges dirty white to rusty, tips dirty white. Tertiaries dark blackish-brown paling to gray along margins with dull rusty to white edges. Primaries black, when folded extending just beyond tail. In flight, primaries and secondaries appearing uniformly dark, the wing-stripe inconspicuous. Tail dark above with narrow pale edges.

Underparts: Chin white, throat creamy, faintly streaked brown. Foreneck and upper breast washed with buff, with narrow short brown streaks which extend across breast. Lower breast buffy, with brown streaks which do not extend across middle but are interrupted by a creamy patch extending down center of lower breast to upper belly. Remaining underparts white. Tail grayish beneath, lateral feather tips rounded, the central pair elongated.

Bare parts: Bill approximately three times the loreal distance or nearly 1.3 times the length of the head, black with a hint of green at the base of lower mandible, this all but invisible in the field. Bill straight except outer third slightly decurved, thin throughout and not particularly deep at base. Tip fine with no lateral expansion. Legs olive-green to grayish horn, with a dull orange cast posteriorly. Toes unwebbed.

Voice: Several times when the bird was alone and at some distance from all other shorebirds, it arose and called after taking flight and thus we could be certain of its voice. Two slightly different notes were heard. The first, a high-pitched "squeep" with a slight upward inflection, recalled Western Sandpiper or White-rumped Sandpiper, but was not as thin, as brief or as high-pitched. The second call was similar but longer, with a slight trill and upslurred conclusion: "squreep." Neither call resembled the vocalization of any calidrid with which we were familiar.

Shape: The long bill was the most remarkable aspect of the bird's silhouette. The body appeared plump and the legs



This posterior view of Calidris paramelanotos shows the conspicuous buffy mantle "V;" the degree to which this "V" was obvious depended greatly on posture. Duxbury Beach, Massachusetts, September 21, 1987. Photo/Paul K. Donahue.



Cox's Sandpiper, Duxbury Beach, Massachusetts, September 21, 1987. This view of Calidris paramelanotos shows an inconspicuous mantle "V," the grayish-white nape thinly streaked with gray-brown, pale median and lesser secondary coverts, and olive legs slightly brighter posteriorly. Photo/Peter D. Vickery.

somewhat longer than Pectoral Sandpiper. The tips of the folded wings projected slightly beyond the tail.

Behavior: The bird fed actively, but rather methodically, for much of our period of observation. It did not probe in the sand of the beach but remained

in the wrack, as did all the other shorebirds. When from time to time a Merlin (*Falco columbarius*) harried the flock, the Cox's Sandpiper usually froze in an alert erect posture, but occasionally would crouch. It showed no preference in its association with the other shorebirds.



Cox's Sandpiper with a juvenile Semipalmated Sandpiper at Duxbury Beach, Massachusetts, September 21, 1987. Note the much larger size heavier build and longer legs of the Cox's Sandpiper. Photo/Simon A. Perkins.

DISCUSSION

It has been suggested that Cox's Sandpiper might be a hybrid between Pectoral and Curlew sandpipers, the only species likely to produce a bird with its characteristics. However, hybridization is unknown in *Calidris*, and the ever greater number of recent Cox's Sandpiper sightings in Australia, some 40 or more to date, argues against the hybrid hypothesis. We compared the Plymouth bird with specimens of juvenile Pectoral and Curlew sandpipers, and found several characters absent in both. These we offer as new evidence that Cox's Sandpiper is not a Pectoral and Curlew hybrid, and is probably a species.

- Pointed centers in the outer row of upper scapulars, in the lower scapulars and in the inner greater secondary coverts.
- Broadly anchor-shaped centers in the inner row of lower scapulars.

- Pale gray centers in the median and lesser secondary coverts.
- Subterminal darkening of the centers of the inner greater secondary coverts.
- Rufous bars on lower back more prominent than in the freshest Pectoral Sandpiper.
- Prominent split supercilium extending well behind eye.

To conclude, it was unfortunate that the confusion surrounding its identity so delayed the spread of news about the Plymouth bird that fewer than 70 people saw it, despite its presence for eight days at a precise and public locality.

ACKNOWLEDGEMENTS

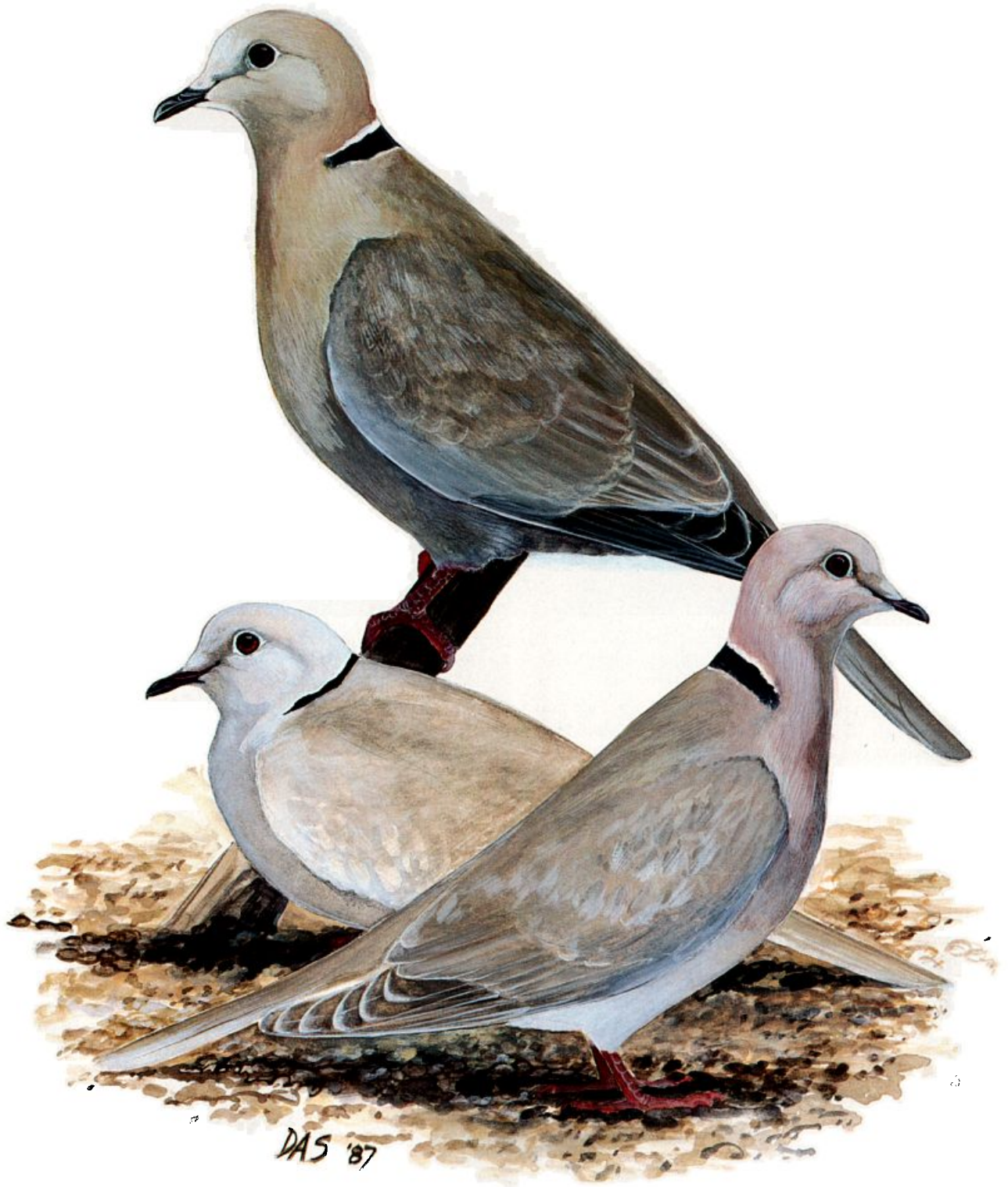
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Eurasian Collared-Dove (top), domestic collared-doves (Ringed Turtle-Dove) (middle, facing left), and wild phenotype (African Collared-Dove) (bottom, facing right). Painting/David A. Sibley.