AN ALBINISTIC MARBLED GODWIT: A FIRST RECORD

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Albinism occurs infrequently in the family Scolopacidae as compared to other avian families (Sage 1963, Gross 1965). There are apparently no previous records of albinism for the Marbled Godwit (*Limosa fedoa*) (Ross 1963), although there is one record each for the Hudsonian Godwit (*Limosa haemastica*) (Deanne 1880), and the Bar-tailed Godwit (*Limosa lapponica*) (Sage 1962).

At 15:30 on 9 February 1974 on the east shore of Drake Estero, Point Reyes National Seashore, Inverness, California, I spent approximately 15 min observing an albinistic Marbled Godwit foraging on mudflats among a relatively large flock of godwits. Observations were made from a distance of about 30 m with a 15–60× "zoom" telescope. There were no clouds or wind, and glare was minimal.

A description follows: Bill—flesh colored with black tip, apparently normal; Irides—black, apparently normal; Legs—dark or black, apparently normal; Body and head—entirely or almost entirely diluted to white on all parts except axillae and wing linings, which were heavily tinged cinnamon. The back and the wing coverts retained a distinct pattern of dusky, transverse barring. A less distinct pattern of faint barring was present ventrally on the rectrices.

The coloration of this individual seems to have resulted from extreme dilution of the rufous-brown, and cinnamon pigmentation in most of the plumage and should therefore be considered as a case of "imperfect" albinism (Pettingill 1956).

LITERATURE CITED

DEANNE, R. 1880. Additional cases of albinism and melanism in North American birds. Bull. Nuttall Ornithol. Club 5:25–30.

GROSS, A. O. 1965. The incidence of albinism in North American birds. Bird-Banding 36:67–71.

PETTINGILL, O. S., JR. 1956. A laboratory and field manual of ornithology. Burgess Publ. Co., Minneapolis.

ROSS, C. C. 1963. Albinism among North American birds. Cassinia 47:2–21.

SAGE, B. L. 1962. Albinism and melanism in birds. Brit. Birds 55:201–225.

SAGE, B. L. 1963. The incidence of albinism and melanism in British birds. Brit. Birds 56:409–416.

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MORPHOLOGICAL AND BIOCHEMICAL EVIDENCE OF HYBRIDIZATION BETWEEN CAVE AND BARN SWALLOWS

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A recent breakdown of ecological segregation of the Cave Swallow (*Petrochelidon fulva*) and other hirundinids in central Texas was reported by Martin (1974). Breeding of the Cave Swallow in the United States previously was limited almost entirely to caves and sinkholes, where it nested in isolation from other swallows (Selander and Baker 1957, Wauer and Davis 1972), but it now also nests in highway culverts and other man-made structures, where it is associated with the Barn Swallow (*Hirundo rustica*). Among the potential hazards to both species in this altered situation is failure of premating isolating mechanisms (Martin 1974). We now report the occurrence of two hybrids between these species. The hybrid identity of these individuals was recognized first on the basis of morphological features and subsequently confirmed by an electrophoretic analysis of protein variation.

The ecology of swallows is being studied by Martin along a transect coincident with U.S. Highway 90, lying just south of the Edwards Plateau in central Texas and spanning a distance of 200 km from Hondo, Medina County, to Comstock, Val Verde County. In this area, tributaries of the Nueces River and the Rio Grande draining the Edwards Plateau pass through concrete culverts beneath the highway. The Cave Swallow is absent at either end of the transect, but both Cave and Barn Swallows nest together in most culverts between Uvalde and the Kinney-Val Verde county line. Additionally, single pairs of Cave Swallows have been found nesting in colonies of Barn Swallows in two culverts (numbers 8 and 9) 32 km E of the main area of co-occurrence.

Clutch-size, brood-size, and other data for nests in culverts were recorded twice weekly from 7 April to 15 September 1973. Examination of nest B.5 (in culvert 8, 24.3 km W Hondo) on 23 May indicated that the three large juveniles present were of two phenotypes. One of the nestlings was *H. rustica*-like in plumage color and pattern, whereas the plumages of the other two were intermediate between those of *H. rustica* and *P. fulva*. Repeated observation indicated that both adults attending the nest were phenotypically *H. rustica*. Originally, the nest held five eggs (within normal range of clutch size for both species) that apparently were laid in normal temporal sequence. However, one nestling from this clutch disappeared from the nest in the period from 2 to 4 days after hatching, and another individual was lost either as an egg or as a nestling a day or so after hatching. On 30 May the *H. rustica*-like juvenile flew from the nest as it was being inspected. The two young of intermediate plumage were collected from the nest at night on 1 June, but the adults escaped from the nest and were not collected.

MORPHOLOGICAL EVIDENCE

In the two apparent hybrids the color of most of crown, nape, and back was intermediate between the glossy blue-black of juveniles of *H. rustica* and the duller dark brown of those of *P. fulva*. The breast and abdomen were cinnamon as in *H. rustica*, not

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