

THE STATUS OF HARLAN'S HAWK IN SOUTHERN CALIFORNIA

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Harlan's Hawk, *Buteo jamaicensis harlani*, has had a checkered taxonomic history since its description by Audubon (1830) from two specimens collected in Louisiana. It has at times been considered a separate species, a subspecies of the Red-tailed Hawk, *Buteo jamaicensis*, or perhaps even a local color morph or unique immature plumage of the latter rather than a distinct taxon. Ridgway (1890) suggested it be treated as a distinct subspecies of the Red-tailed Hawk, but it was still considered by some to be a separate species as late as 1959 (AOU 1957, Gabrielson and Lincoln 1959). Studies by Swarth (1926), Mindell (1983), and Snyder and Snyder (1991) have now established that *harlani* is best treated as the local subspecies of the Red-tailed Hawk in western, central, and south-coastal Alaska, southwestern Yukon, and northwestern British Columbia (AOU 1998). This view, however, is still not unanimous (Dunne et al. 1988). Harlan's Hawks make the longest migration of any of the several subspecies of the Red-tailed Hawk. Their path is east and southeast, passing over the ranges of a number of other subspecies (Mindell 1983, 1985), and they winter among individuals of the subspecies *calurus*, *borealis*, and *krideri*. The winter range of *harlani* is largely in the southern Great Plains from Kansas, southern Missouri, and Arkansas south to Texas and Louisiana (AOU 1957, Lowery 1974, Oberholser 1974); *harlani* may occur in northeastern Mexico in winter (Howell and Webb 1995). Individuals have been recorded as far east as Pennsylvania (Todd 1940) and Mississippi (AOU 1957) and west to California (Grinnell and Miller 1944, Small 1994, Garrett and Dunn 1981) and Washington (Lavers 1975). The type specimen of *Buteo cooperi*, collected near Mountain View, Santa Clara County, California, is also referable to *harlani* (Grinnell 1930).

In northern California, Harlan's Hawk is a rare but regular winter visitor, particularly in the Sacramento Valley and northeastern California (Grinnell and Miller 1944, Small 1994, T. Manolis pers. comm.). In southern California there are sight but no specimen records, from San Luis Obispo County south to Imperial County, mostly east of the coastal zone (Garrett and Dunn 1981, K. Garrett pers. comm.). In Orange County there are winter sight records of two individuals from the Plano Trabucco and Upper Newport Bay/San Joaquin Marsh (Hamilton and Willick 1996) and a recent sighting in Yorba Linda on 4 February 1998 (J. Kidd pers. comm.). Other recent sight records are of a dark individual with extensive white chest markings and very white tail seen 20 November 1994 in the Puente Hills near Whittier, Los Angeles County, and the same or very similar bird seen 18 February 1996 at Prado Dam on the Santa Ana River, Riverside County (J. Schmitt pers. comm.).

On 1 March 1990 an adult Harlan's Hawk was found shot at the Oak Canyon Nature Center in Anaheim Hills, Orange County. Attempts to rehabilitate it were unsuccessful. This specimen, the first for southern California, is number 7812 in the collection of California State University, Long Beach. An adult female, it had a regressed ovary and measured as follows: wing 393 mm, tail 212 mm, tarsus 95 mm. The tips of the outer primaries are badly broken, possibly due to its time in captivity. Although on the small size, the measurements for tail and tarsus are within the range given for female *harlani* by Oberholser (1974).

This bird is in the first adult dark-morph plumage (i. e., second basic) with retained juvenile outer ninth and tenth primaries and two to four secondaries. It exhibits the

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following characteristics typical of *harlani*: (1) general color charcoal blackish brown with irregular white mottling on the chest and sparse whitish mottling on the belly, sides, and legs; (2) extensive white feather bases on occiput and nape; (3) bases of longest scapulars gray; (4) underwing coverts mostly black with sparse to moderate whitish spotting and mottling; (5) barring of remiges irregular and often disrupted and disintegrating to spots and freckling on primaries.

The tail is typical of *harlani* with very irregular freckling, spotting, and blotching and some longitudinal streaking as well as a tendency toward a subterminal band. No two rectrices are alike. There is a tendency for two or three thick dark brown bands in the basal portion of the outer vanes of some rectrices. There is a broad rufous tinge to areas of the tail and upper tail coverts. On the tail, this rufous is confined mostly to the outer vanes, the inner vanes appearing largely whitish in ground color and, on average, more sparingly marked than the outer vanes.

Confusion with similar appearing but clearly red-tailed dark-morph adult Red-tailed Hawks has perhaps hindered detection of additional Harlan's Hawks in southern California and other parts of the winter range. However, field identification of Harlan's Hawk has been greatly facilitated by several publications dealing with *Buteo* hawks (Lavers 1975, Mindell 1985, Kaufman 1989, Wheeler and Clark 1995). They emphasize the whitish tail with dark subterminal band and overall lack of brown or rufous tones in the body plumage. A slimmer appearance with longer tail and primaries and straight-edged wings are also mentioned as field marks (Dunne et al. 1988). White streaking or spotting on the chest is typical (Lavers 1975) and can be extensive in intergrades between *B. j. harlani* and *B. j. calurus* (Mindell 1983, 1985). Closer examination of all dark Red-tailed Hawks may augment our knowledge of the status and distribution of Harlan's Hawk in winter.

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