DIPPERS — FAMILY CINCLIDAE

American Dipper Cinclus mexicanus

Cold, rushing streams of pure water in pristine wilderness—the American Dipper is an emblem of this fragile habitat. Arid San Diego County lies at the southern tip of the dipper's range along the Pacific coast. The species survives here along less than 3 miles of a single creek draining Palomar Mountain.

Breeding distribution: The American Dipper is resident at a single known site in San Diego County: Pauma Creek, on the steep southwest slope of Palomar Mountain (E13). Following reports of dippers along Pauma Creek by trout fishermen and Evan Jorgensen's sighting of an



Photo by Anthony Mercieca

agitated pair on 24 May 2001, we undertook a more intensive survey of the creek between 1800 and 2000 feet elevation two weeks later on 7 June. This search revealed no more than one adult seen at a time, sometimes carrying insects, plus a fledgling hiding under boulders and behind a small waterfall (C. Ferguson, K. J. Winter, R. Breisch, P. Unitt, NAB 55:483, 2001). Earlier records from Pauma Creek range from about 4500 feet elevation (one on 16 June 1971, AB 25:907, 1971) down to 1200 feet (one on 8 December 1946, E. Beemer).

Searches of sections of Marion and Agua Tibia creeks (D12) and the west fork of the San Luis Rey River from Barker Valley to the former West Fork Conservation Camp (E16) yielded no dippers. Though the dipper nested at 2600 feet elevation on the San Luis Rey River (G16) in 1933 (eggs collected 25 May, J. B. Dixon in Willett 1933; WFVZ 754), and was seen at the same site 11–23 June 1984 (R. Higson, AB 38:1063, 1984) and 22 May 1988 (M. and B. McIntosh, AB 42:482, 1988), W. E. Haas has surveyed the area intensively since 1995, finding no dippers. The location of the nests reported from "a falling stream of water in the Cleveland National Forest at about 3500 feet elevation" by Abbott (1927a) has been lost.

American Dippers may have been resident at least formerly in canyons draining east and northeast from Hot Springs Mountain. None of the records from this area are from the breeding season, but our coverage of this extremely rugged area in either the breeding season or winter was not exhaustive.

Nesting: Dippers nest close to streams, often directly over water or behind waterfalls, in sheltered crevices among rocks or tree roots or on banks. Nesting data from San Diego County are confined to the egg set collected 25 May 1933 and the nests found in August 1925 and on 20 June 1926 (Abbott 1927a). On the latter date the nest contained large nestlings, which fledged by 27 June. The species' breeding season varies from year to year

with variation in local weather and stream conditions (Kingery 1996).

Migration: The American Dipper is largely nonmigratory, known to move long distances only in the northern part of its range.

Winter: A winter survey of Pauma Creek between 1800 and 2400 feet elevation on 18 January 2002 revealed three individuals (J. O. Zimmer, R. Breisch, et al.). The only winter records for San Diego County away from Pauma Creek are from canyons draining north and northeast from Hot Springs Mountain. From 1977 to 1990, the dipper was reported 10 times from this area, twice from Alder Canyon (C21), four times from Sheep Canyon (D21/D22), twice from Cougar Canyon (D22), and twice from Borrego Palm Canyon (F23), on dates from 23 November to 30 January (A. G. Morley et al., Anza-Borrego Desert State Park database).

Conservation: The lack of recent records from the San Luis Rey River or the canyons draining Hot Springs Mountain is not a good sign for the American Dipper's outlook in San Diego County. On the basis of the length of suitable habitat, the population along Pauma Creek is very small, perhaps only four or five pairs. Much of the creek is within the Cleveland National Forest, but it could be degraded by multiple factors. Drought or groundwater extraction upstream could reduce the stream flow below what can sustain dippers. Water pollution has affected dippers elsewhere. Though the deep canyon of Pauma Creek is little visited by people now, additional recreational use could disturb the dippers significantly, as well as contribute to pollution.

Taxonomy: No specimen from San Diego County has been collected, but all American Dippers resident north of the Mexican border are *C. m. unicolor* Bonaparte, 1827.