

### Acorn Woodpecker *Melanerpes formicivorus*

The Acorn Woodpecker is famed for its unique habit of storing acorns in granary trees, which the birds may riddle with thousands of holes. It will also store acorns in utility poles, the walls of wooden buildings, and boulders composed of soft granite. Its communal breeding and social life have attracted intensive study, leading to new perspectives on animal behavior. With acorns so important in its diet, the woodpecker is intimately linked with oak woodland. In San Diego County it is common year round wherever there are extensive groves of oaks.

**Breeding distribution:** The Acorn Woodpecker's distribution in San Diego is essentially the same as that as oak woodland. The habitat can be groves of the coast live oak only, riparian woodland containing some oaks, or montane forest in which the black, canyon live, and coast live oaks are mixed with conifers. The latter may be superior habitat, as pine trees, with their softer bark, make better granary trees than oaks, in which the woodpeckers typically drill granaries in dead snags only. Also, the tannin content of canyon live oak acorns is less than that of coast live oak acorns, making the former a superior food (Koenig and Heck 1988, Koenig 1991). Our highest estimates of Acorn Woodpecker numbers were all from mixed montane forest, up to 100 as in Palomar Mountain State Park (E14) 17 May 1997 (K. Messer, R. Turner), in Cuyamaca Rancho State Park (N20) 17 July 2000 (B. Siegel), and around Mount Laguna (O23) 6 June 1998 (A. E. Klovstad, C. L. Mann). With decreasing elevation, the Acorn Woodpecker becomes less common and more localized, in tandem with oaks. The range approaches within 3 miles of the coast along San Onofre Creek (D2; up to four on 31 March 2001, R. E. Fischer), then con-

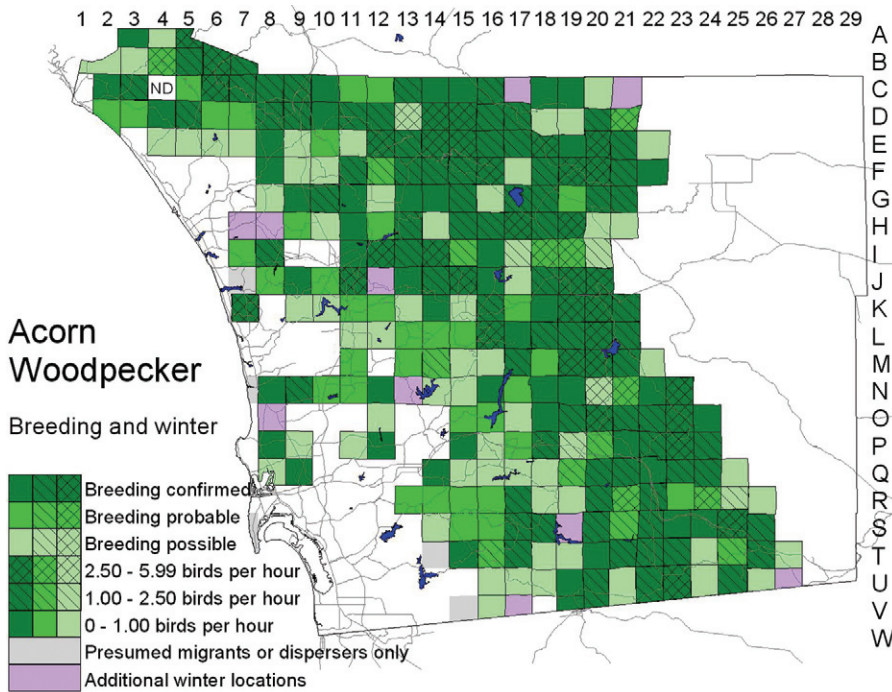


Photo by Anthony Mercieca

tracts inland toward the south. Outlying locations toward the south are Los Peñasquitos Canyon (up to 22 in square N9 on 15 June 1997, L. D. and R. Johnson; up to 6 in square N8 on 2 May 1999, P. A. Ginsburg), San Clemente Canyon (P8; up to three on 27 April 1999, M. B. Stowe), and Tecolote Canyon (Q8/Q9; up to four on 8 August 1998, E. Wallace).

A unique outlying colony of the Acorn Woodpecker is in Quail Botanical Gardens, Encinitas (K7), a completely man-made woodland outside the species' natural range. Counts here during the breeding season averaged 13 birds (R. and A. Campbell). At Quail Gardens, the tree supplying the woodpecker's acorns is an Old World species, the cork oak.

The eastern edge of the Acorn Woodpecker's range tracks the eastern edge of the range of the coast live oak almost exactly, though the birds are lacking from small



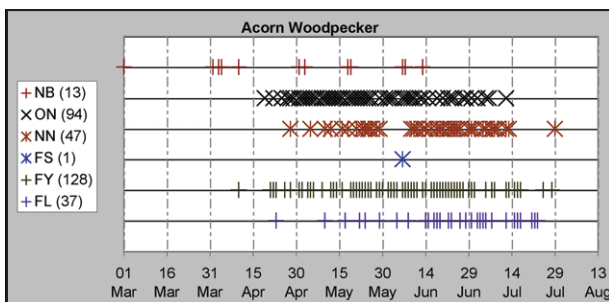
**Migration:** The Acorn Woodpecker is nonmigratory, rarely appearing outside its breeding range. There is little if any seasonal pattern to these wanderers, which crop up in the middle of the breeding season as often as in fall and winter. Most records of them are within 5 miles of sites where the species is resident. But there are at least 15 records from Point Loma, most of single individuals, though five were there 15 September–15 October 1987 (R. E. Webster, AB 42:136, 1988). Only one Acorn Woodpecker has been noted on the coastal slope as far from the breeding range as the Tijuana River valley, on 10 September 1972 (AB 27:122, 1973).

Similarly, a few Acorn Woodpeckers have been noted on the east slope of San Diego

isolated groves. The easternmost point in San Diego County where the species is resident is at the south end of McCain Valley Road, at the junction with old Highway 80 (west edge of T27; up to three on 3 July 2000, J. K. Wilson).

**Nesting:** In California, most Acorn Woodpeckers live in groups, in which both sexes share mates and a single nest cavity. Koenig and Mumme (1987) studied the woodpecker’s unusual sex life extensively, putting it in its ecological context. The species’ nest holes, though, are typical of the woodpecker family, bored on the underside of slightly angled trunks or branches. Atlas observers noted nests in power poles and snags of pine and white alder, as well as in coast live, black, and Engelmann oak. In Quail Gardens, K. L. Weaver found nests in a dead palm and a dead pine.

Our observations show that in San Diego County the Acorn Woodpecker usually begins egg laying in early April and continues through mid June. A few suggest laying in late March; a record of fledglings at Live Oak Park (D8) 23 April 1998 (M. Freda) implies laying by 12 March, earlier than the earliest date of 17 May for the well-studied Hastings Reservation, Monterey County (Koenig et al. 1995).



County’s mountains, east of the oaks. On or near the desert floor there are only three records, of one at Lower Willows (D23) 26 June 1988 (A. G. Morley), one near Barrel Spring in the Ocotillo Wells off-road vehicle area (H29) 10 June 1987 (A. G. Morley), and one at the former Fish Creek Ranger Station (L29) 15 May 1973 (ABDSP database).

**Winter:** The Acorn Woodpecker’s distribution and abundance in winter do not differ materially from those in the breeding season. Our highest winter count was of 175 in Pine Hills (K19) 6 February 1999 (S. E. Smith, D. W. Au).

**Conservation:** There is no evidence for any change in the Acorn Woodpecker’s status in San Diego County through recorded history. The species tolerates low-intensity development of its habitat provided oaks are left undisturbed. Whether such development is compatible with the long-term regeneration of oak woodland, however, is another question. The woodpeckers sometimes take over wooden buildings as granary sites, much to the consternation of the building’s human owners. The population at Quail Gardens appears to represent the only instance of Acorn Woodpeckers colonizing an artificial habitat in San Diego County. The birds there rely, however, on dead branches and trees that will have to be removed. The natural processes of tree death and decay that provide the Acorn Woodpecker with nest sites may be incompatible with the intensive management a botanical garden requires. The drought of 1999–2004 left many oaks in San Diego County stressed or dead, suggesting that climate change leading to a drier climate could affect the Acorn Woodpecker adversely.

**Taxonomy:** Acorn Woodpeckers resident in San Diego County and elsewhere in California are *M. f. bairdi* Ridgway, 1881, larger and heavier billed than the subspecies east of the Colorado River.