

NEW WORLD QUAIL — FAMILY ODONTOPHORIDAE

Mountain Quail *Oreortyx pictus*

Even though it often passes unnoticed by birders unfamiliar with its calls, the Mountain Quail is one of the commonest birds in San Diego County's higher foothills and mountains. The dense chaparral clothing these mountains is the quail's preferred habitat. In April and May the slopes echo with the Mountain Quail's ventriloquial calls, yet only the hiker on the trail at dawn has a good chance of actually seeing the birds. In spite of its preference for dense vegetation, the Mountain Quail recolonizes recovering burned chaparral quickly, ahead of some other seemingly more mobile birds.

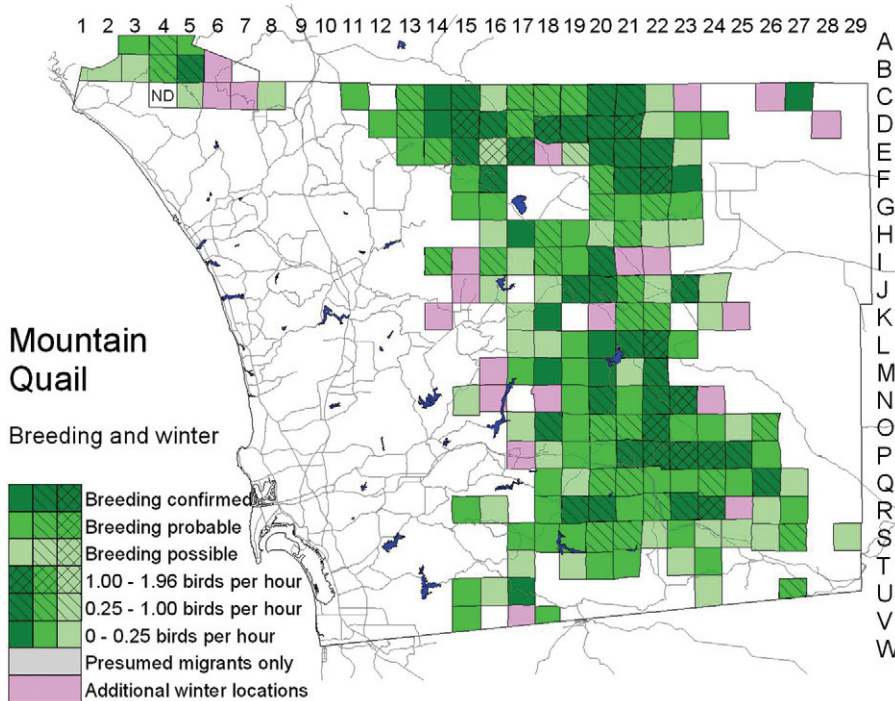
Breeding distribution: The Mountain Quail occurs in all of San Diego County's mountains, up to near the summit of Hot Springs Mountain (11, including a brood of chicks, 3 June 2000, K. L. Weaver, C. R. Mahrtd). Most of our higher counts are from the higher elevations, with as many as 34 per day on the north slope of Palomar Mountain (D15) 14 May 1999 (K. L. Weaver) and 30 in the Laguna Mountains from Oasis Spring to Garnet Peak (N23) 24 May 2001 (K. J. Winter). But the quail is not a bird of coniferous forest, except where an understory of chaparral grows near the trees, and it ranges well below the county's higher mountains. On the coastal slope of southern San Diego County it extends down to about 2000 feet elevation, but in the county's northwestern corner, in the Santa Margarita Mountains, it ranges down to the bases of the steep hills, to about 450 feet elevation along San Mateo Creek (B3; up to five on 12 June 2001, M. Fugagli). The Mountain Quail is rare along the Santa Margarita River in Temecula Canyon (C8; only record 1997–2002 is of one



Photo by Jack C. Daynes

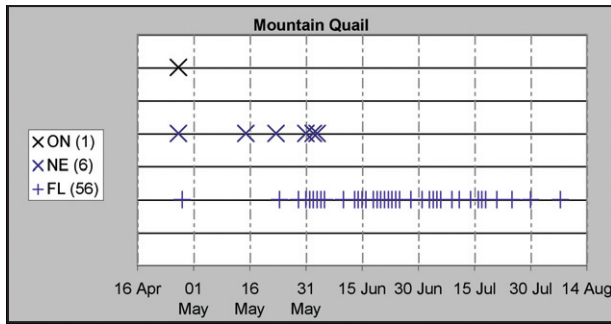
on 24 May 1997, K. L. Weaver), and the range is broken between there and the west base of Palomar Mountain.

In central San Diego County outlying localities on the west are Orosco Ridge (I14; 14 on 12 May 2000, R. L. Barber) and El Capitan County Open Space Preserve (N15; one on 14 April 2001, R. C. Sanger). In southern San Diego County the Mountain Quail ranges west to Lyons (S17) and Mother Grundy (T17) peaks, with isolated populations on the east slope of McGinty Mountain (R15; five on 11 March 2000, J. R. Barth) and near the top of Sycuan Peak (R16; one on 30 April 2001, P. Unitt) and over most of Otay Mountain (U15/U16/V15; up to five on the north slope, U15, 25 May 1999, G. L. Rogers) and Tecate Peak (V18; three on 10 May 2001, D. C. Seals). The population on Otay Mountain is not completely isolated



from the main range of the species, as shown by an adult with four chicks about 1600 feet elevation near Dulzura Summit on Highway 94 (U17) 11 July 2000 (D. W. Povey, his only record of the species at this site in 17 years).

On the east side of the mountains, the Mountain Quail occurs in desert-edge scrub, though more sparsely than in dense chaparral. Probably to drink at springs, the birds come rarely all the way to the base of the mountains, where we recorded them at 2050 feet at Mortero Palms (S29; two on 18 April 1999, P. Unitt, A. Mauro) and at 1000 feet elevation near Whitaker Horse Camp (D24), site of three observations in April 2001 (maximum four birds on 4 April, J. O. Zimmer).



Small outlying populations live in the Pinyon Mountains (J23/J24/K24) and in the Santa Rosa Mountains (C27/D27/D28).

The Mountain Quail is common in the mountains of northern Baja California, but there is a partial break in the range along the Mexican border on the Campo Plateau, perhaps due to the region's flatter topography. According to Brennan et al. (1987), rugged terrain is not a prerequisite for the Mountain Quail, but the association between the quail and steep slopes is as strong in San Diego County as elsewhere.

Nesting: The Mountain Quail nests on the ground, sheltered by a shrub, branch, or rock. One nest we found was protected on all sides by being wedged between an overhanging rock and a small yucca. Our observations imply the species lays from early April to at least early June.

Winter: The Mountain Quail is less vocal and so more easily overlooked in winter than in spring. Nevertheless, large flocks are seen occasionally in winter, up to 40 in Barker Valley (E16) 21 February 2001 (J. O. Zimmer), 40 in Banner Canyon (K21) 7 February 1999 (A. Mauro), and 60 near Shingle Spring (D21) 23 December 2000 (L. J. Hargrove). The Mountain Quail migrates altitudinally in the Sierra Nevada but there is as yet no evidence for such a migration in San Diego County. The birds occur as high as the summit of Hot Springs Mountain (E20), at least in some winters (up to two on 9 December 2000, K. L. Weaver, C. R. Mahrdf). Comparison of snowy winters with dry ones might reveal some annual variation. The few atlas squares where we recorded the Mountain Quail in winter but not summer are probably all areas where it is resident in small numbers year round.

Conservation: Though the Mountain Quail has declined in abundance at the northern end of its range, in San Diego County it remains common with no suggestion of change. Its preferred habitat is little disturbed, and much lies within the Cleveland National Forest and Palomar, Cuyamaca, and Anza-Borrego Desert state parks. The primary factor affecting the Mountain Quail's habitat is fire, yet the species seems little affected by fires. A study comparing mature and young (average age six years) chaparral near Pine Valley found the Mountain Quail to be the eighth commonest bird in the young chaparral, the sixth commonest in the old. The quail was more numerous in the mature chaparral but the difference was not statistically significant (Cleveland National Forest unpubl. data). The abundance of food in the young chaparral, still dominated by herbs, may compensate for the reduced cover that may expose the birds to greater predation.

Taxonomy: Because Friedmann (1946) questioned the validity of *O. p. eremophilus* van Rossem, 1937, to which San Diego County Mountain Quail have long been assigned, I investigated the species' variation in color with a Minolta CR-300 colorimeter. *Oreortyx p. eremophilus* (type locality Argus Mountains, Inyo County, California) may be valid after all, distinguished from nominate *O. p. pictus* (Douglas, 1829; type locality confluence of Willamette and Santiam rivers, Oregon) by its paler back and from *O. p. confinis* Anthony, 1889 (type locality Sierra San Pedro Mártir, Baja California) by its paler breast. Colorimeter readings of the darkness (*L*) of the lower back range from 24.1 to 28.7 in 14 October–January specimens from eastern Oregon (nominate *pictus*) but from 30.4 to 32.0 in four October specimens from the Argus Mountains (*eremophilus*). Readings of the breast range from 33.8 to 37.7 in 19 specimens from the Sierra San Pedro Mártir (*confinis*) but 38.1 to 39.6 in the four specimens from the Argus Mountains.

Twenty specimens from San Diego County are much closer to *confinis* than to *eremophilus*; they range in breast darkness from 33.3 to 38.4. A *t* test revealed that the mean of the San Diego County sample (36.4) is not significantly different from that of the Sierra San Pedro Mártir sample (36.0; *p* = 0.16)