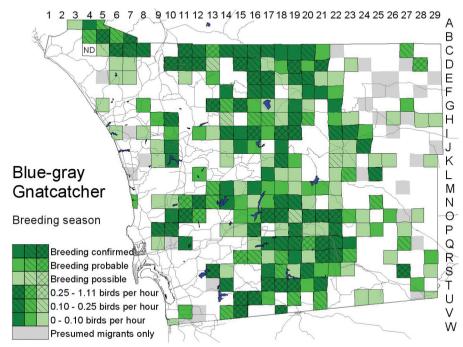
## OLD WORLD WARBLERS AND GNATCATCHERS — FAMILY SYLVIIDAE

## Blue-gray Gnatcatcher Polioptila caerulea

The Blue-gray Gnatcatcher uses a wide variety of habitats: oak woodland, riparian woodland and scrub, pinyon/juniper, desert washes, chaparral, and sage scrub. It is migratory, occurring mainly in the foothills in the breeding season and at low elevations in winter. In open groves of the Engelmann oak and stands of the Tecate cypress it can be fairly common, but over most of the county it is still uncommon or rare as a breeding bird. The Blue-gray Gnatcatcher is perhaps the greatest beneficiary of the cowbird trapping intended to benefit Bell's Vireo; it is now



Photo by Anthony Mercieca



far more numerous and widespread as a breeding species than known in the 1980s.

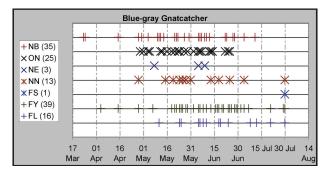
Breeding distribution: The Bluegray Gnatcatcher's current distribution appears strangely patchy. The species is most numerous between 1000 and 4000 feet elevation but far from uniform even there. Zones of concentration lie around the base of Palomar Mountain (maximum count 20 in Agua Tibia Wilderness, C13, 18 May 2001, K. J. Winter), north and northwest of Hot Springs Mountain (C20/D19/D21), from Lusardi Canyon to Black Canyon west of Mesa Grande (G15/ 116), around Viejas and Poser mountains (O17/O18), south of Pine Valley (Q20/R20/R21),

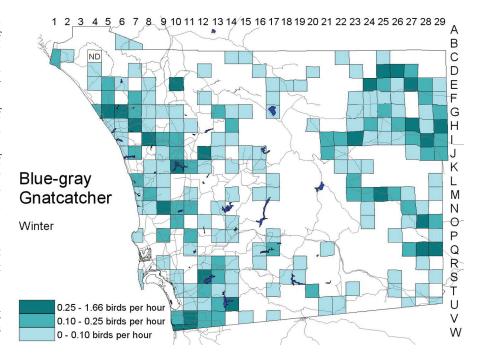
from Mother Grundy Peak to McAlmond Canyon north of Barrett Junction (T17/T18/ T19), and on Otay Mountain (U15/U16/V15). The Blue-gray Gnatcatcher ranges uncommonly as high as the tops of the county's highest peaks with four, including a pair building a nest, near the summit of Hot Springs Mountain (E20) 29 June 2001 (K. L. Weaver). One area of concentration, however, Miramar Air Station, especially east of Interstate 15 (N11/ N12/O11/O12), lies largely at an elevation of 500-1000 feet (O11; 12 on 20 June 1999, G. L. Rogers). There are a few breeding-season records right along the coast (e.g., Torrey Pines State Reserve, N7, two on 11 July 1998, K. Estey; Tijuana

River valley, W10, one on 13 and 23 May 2000, W. E. Haas), but breeding is confirmed no nearer the coast than about 5 miles inland in southwestern Miramar (P9; nest with eggs 8 May 1997, K. Kenwood).

In the Anza–Borrego Desert the Blue-gray Gnatcatcher occurs sparsely in the pinyons of the Santa Rosa and Vallecito mountains (up to five in the Santa Rosas near the Riverside County line, C27, 3 May 2000, P. Unitt). At lower elevations in the desert it is even scarcer, irregular at any given site, occurring mainly in junipers, at oases like Lower Willows (D23), or in well-vegetated washes (maximum six, one building a nest, in Mine Canyon, J24, 15 April 2001, L. and M. Polinsky). Occasional birds, singing territorially, are found in scattered clumps of mesquite even in the emptiest desert (e.g., two, one singing, 2.7 miles northeast of Ocotillo Wells, H29, 27 April 2001, J. R. Barth).

**Nesting:** The Blue-gray Gnatcatcher builds its nest in either trees or shrubs, high or low. Heights of nests atlas observers described ranged from 4 to 50 feet. The most frequently reported supporting plant was Engelmann oak with five nests; coast live oak was second with four nests. Other trees were sycamore, black oak, Coulter pine, pinyon, and Tecate cypress; shrubs were scrub oak, red-shank, chamise, white sage, and laurel sumac. Blue-gray Gnatcatchers often build in quite exposed situations with





little or no foliage screening the nest. The Engelmann oak's open branches offer little concealment. Two nests were in dead oaks; one was in a leafless burned snag of a shrub. This failure to hide the nest may contribute to the Blue-gray Gnatcatcher's being so frequent a host of the Brown-headed Cowbird.

In San Diego County the Blue-gray Gnatcatcher lays mainly from mid April to early July. Nest building as early as 24 March (1998, near Angelina Spring, I22, P. K. Nelson) suggests laying earlier, though females may delay laying five to ten days after a nest has been completed (Ellison 1992). Adults gathering insects in Dameron Valley (C16) 4 April 1998 and near Wilderness Gardens (D12) 15 April 2000 (K. L. Weaver), however, confirm laying by about 22 March and 2 April, respectively, earlier than historically known for California. Bent's (1949) earliest egg date for the state was 5 April.

Migration: Determining the Blue-gray Gnatcatcher's migration schedule is difficult to do with precision because the species is so widespread in both summer and winter. On the basis of sightings in breeding habitat in winter, probably some fraction of the breeding population is nonmigratory. Most of the breeding birds, however, are migratory, beginning to arrive in mid March. Root (1969) observed arrival in Monterey County one year as early as 24 February. The species' movement appears to peak in the first week of April, and spring migrants are largely gone by the middle of April. Exceptionally late records of apparent migrants were of one in the Borrego Valley (F25) 25 April 1999 (P. D. Ache) and one at Point Loma (S7) 16 May 2001 (J. L. Coatsworth). Fall migrants begin returning regularly in the first week of September, rarely in late August (one at Point Loma 26 August 1999, D. K. Adams).

Winter: At this season the Blue-gray Gnatcatcher occurs most commonly in riparian scrub, especially in the

Tijuana River valley, where counts are as high as 20 near the Dairy Mart pond (V11) 16 December 2000 (G. McCaskie). Elsewhere in the coastal lowland the species is generally uncommon. The Blue-gray Gnatcatcher also winters widely if uncommonly in washes and on valley floors in the Anza-Borrego Desert; maximum counts there are of seven in the Borrego Valley's mesquite bosque (G25) 20 December 1998 (P. Unitt), near Barrel Spring (H29) 15 January 2002 (J. R. Barth), and in Box Canyon (L23) 10 January 1998 (S. D. Cameron). The Blue-gray Gnatcatcher even occurs rarely in winter in the same oakwooded and chaparral-covered foothills where it breeds most commonly. Maximum counts in this habitat are of three along Bear Valley Road (Q21) 20 February 1999 and along the Espinosa Trail (R19) 18 February 2001 (A. P. and T. E. Keenan). Such winter records range in elevation as high as 4600 feet near Lost Valley (D20; two on 12 December 1998, J. M. and B. Hargrove).

**Conservation:** Willett (1912) and Stephens (1919a) called the Blue-gray Gnatcatcher "common" as a breeding bird; Sharp (1907) called it "not uncommon." The 37 egg sets collected in San Diego County 1890–1938 attest to the species' abundance in the early 20<sup>th</sup> century as well. By the 1970s, however, breeding Blue-gray Gnatcatchers had become rare, retracting out of the coastal lowland entirely (Unitt 1984). The decline coincided with the Brownheaded Cowbird's invasion of southern California. The Blue-gray Gnatcatcher is a frequent host (Friedmann et al. 1977). In the late 1980s and 1990s, however, the gnatcatchers resurged, and the coincidence of this recovery with the beginning of cowbird trapping suggests that the gnatcatcher benefited, perhaps even more so than Bell's

Vireo, whose sixfold increase over the same period is far better documented (Kus 2002). Yet this simple hypothesis raises further questions: the gnatcatcher's repopulation of lowland riparian woodland, where cowbird trapping has been most intensive, is quite modest. The increase is far more noticeable in chaparral and oak woodland away from the cowbird traps. Is the difference due to the gnatcatcher's habitat preferences? Has the reduction of cowbird numbers been widespread enough over San Diego County to have effects several miles from the traps? Data on both the Blue-gray Gnatcatcher's biology and trends in cowbird numbers are insufficient to answer these questions.

Wintering of the Blue-gray Gnatcatcher in San Diego County at elevations above 1500 feet was unknown before the 1980s. Might climatic warming, reflected mainly in an amelioration of winter low temperatures, be allowing the species to winter at higher elevations and obviating the need for some individuals to migrate? If some birds adopt sedentary habits, they may account for nesting earlier than historically known and help the species avoid cowbird parasitism. On the other hand, if more extended droughts accompany climatic warming, all insectivorous birds will suffer from a reduction in their food supply.

**Taxonomy:** Phillips (1991) reported too much overlap between *P. c. amoenissima* Grinnell, 1926 (widespread in the western United States), and *P. c. obscura* Ridgway, 1883 (of southern Baja California), for the former to be recognized. Tail length is reported to be the primary defining character, but an adequate quantitative comparison remains to be done.