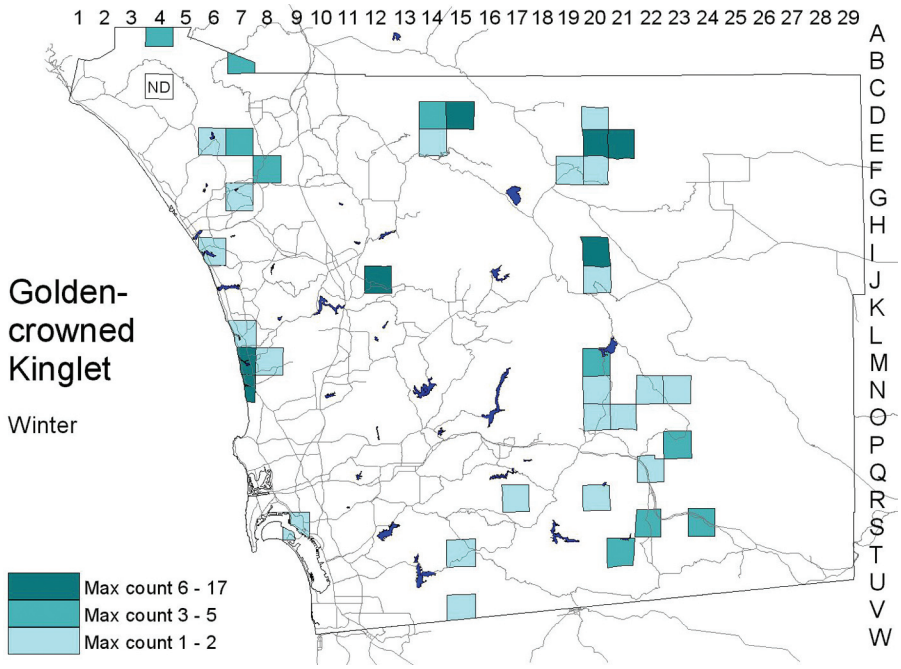
Kinglets — Family Regulidae

Golden-crowned Kinglet *Regulus satrapa*

At home in deep forests of redwood, fir, or spruce, the Golden-crowned Kinglet seems out of place in southern California. It is a rather recent arrival to San Diego, reaching the county as a winter visitor since 1954, as a summer resident since 1986. As a winter visitor it occurs annually, but numbers vary greatly from year to year. Generally it is rare and expected only in coniferous woods near the tops of the county's highest mountains. Occasional irruptions, though, bring small numbers down to the coast and south to the border.

Photo by Scott Streit

Winter: In San Diego County, the Golden-crowned Kinglet occurs in mountain forests, especially where white fir and big-cone Douglas fir dominate. During the atlas period it was recorded in all five of San Diego County's main ranges bearing this habitat. Numbers were largest on Hot Springs Mountain, with up to 17 around the summit (E20) 9 December 2000 and 12 just to the



east of it (E21) 13 February 1999 (C. R. Mahrdt, K. L. Weaver). High counts on the other mountains were of six near the Palomar Observatory (D15) 28 December 2000 (K. L. Weaver), six on Volcan Mountain (I20) 18 December 2000 (R. T. Patton), five on Cuyamaca Peak (M20) 4 February 2001 (M. B. Mulrooney), and three near Wooded Hill, Laguna Mountains (P23), 14 January 1999 (E. C. Hall, J. O. Zimmer).

Away from the higher mountains, Golden-crowned Kinglets are rare and sporadic in oak and riparian woodland, Torrey pines, and planted conifers. One unusual habitat, more chaparral than woodland, was Tecate cypresses near the summit of Otay Mountain (V15), site of two on 1 January 2001 (J. R. Barth). High counts at low elevations were of five in Torrey Pines State Reserve 7 January 2001 (D. K. Adams et al.), six to eight in Torrey and Canary Island pines in an apartment complex near the intersection of Interstate 5 and Del Mar Heights Road (N7) 29 November 1998–16 February 1999 (S. E. Smith), and six in planted conifers in the Wild Animal Park, San Pasqual (J12), 30 December 2000 (K. L. Weaver). There are only two records for the Anza–Borrego Desert, of one in pines planted at the Ram's Hill golf course (H25) 8 November 1987 (P. R. Johnson) and another in Culp Valley (H23) 5 October 1996 (M. L. Gabel).

Golden-crowned Kinglet numbers in San Diego County are highly variable. During the five-year atlas period incursions and off years alternated. The total reported was 6 in 1997–98, 66 in 1998–99, 4 in 1999–2000, 84 in 2000–01, and 9 in 2001–02. The greatest invasion recorded was that of 1976, when the San Diego Christmas bird count alone, held 18 December, yielded 19, 18 of them at Point Loma (S7).

Migration: As an irregular invader, the Golden-crowned Kinglet follows no strict schedule. During invasion years small numbers are usually found in conifers at Point Loma in October. The earliest date published is 25 September (1976, Point Loma, G. McCaskie). During the atlas period the only reports of winter visitors later than 20 February were of one at Golden Hill, Balboa Park (S9), 22 March 2000 (T. Vought) and one on West Mesa, Cuyamaca Mountains (N20) 27 March 1999 (B. Siegel). But after the invasion of 1976 one occurred at Point Loma as late as 14 April 1977 (AB 31:1048, 1977).

Breeding distribution: The Golden-crowned Kinglet was first found summering in San Diego County in 1986, when C. G. Edwards reported up to six on Hot Springs Mountain in June and July (AB 40:1256, 1986), and 1987, when R. E. Webster reported 25 on Middle Peak, Cuyamaca Mountains (M20), 19 July (AB 41:1488, 1987). Since that time the birds have been seen regularly in summer above 5200 feet elevation on both Cuyamaca and Middle peaks, though in smaller numbers. From 1997 to 2001, the maximum count during the breeding season was of four on Middle Peak 2 July 2000 (R. E. Webster). The colonization of Hot Springs Mountain, however, proved transitory. During the atlas period the Golden-crowned Kinglet was absent from this area in summer, in spite of its numbers there in winter. This pattern may suggest that San Diego County's population was established by a single invasion in the mid 1980s and has been dwindling away ever since. However, the Golden-crowned Kinglet was found summering for the first time on Palomar Mountain in 2000, with repeated reports from the steep north-facing canyon of Chimney Creek (E14) 21 May–15 July (G. Hazard, J. R. Barth). No more than a single individual was noted per day.

Nesting: No nest of the Golden-crowned Kinglet has yet been found in San Diego County. The only evidence of the species' breeding is a probable fledgling on Middle Peak 11 June 2000 and a family group of one adult and two fledglings there 2 July 2000 (R. E. Webster). The birds generally build their nests high in conifers, screened by dense clusters of needles (Galati 1991).

Conservation: The Golden-crowned Kinglet's hold as a breeding species on San Diego County is tenuous. Repeated droughts in which conifers succumb to bark beetles erode a habitat already very limited here. Climatic warming bodes ill for this bird of boreal forests at the southern tip of its range. Though the species' migrating as far south as San Diego County is relatively new, the amplitude of the invasions seems to be on the decline. The Golden-crowned Kinglet was noted on 13 of 27 San Diego Christmas bird counts from 1966 to 1992 but none since. Nevertheless, the planting of conifers in the low-

lands has created habitat for Golden-crowned Kinglets in an area that once had little to hold them.

Taxonomy: Phillips (1991) identified the one specimen, from Point Loma 1 November 1966 (SDNHM 38062) as the darker-backed *R. s. olivaceus* Baird, 1864, which breeds in the Pacific Northwest and migrates south to southern California. The specimen from Point Loma is the southernmost of the subspecies. The identification is corroborated by electronic colorimetry: the value of *L* (a measure of darkness) on the back of the Point Loma specimen is 33.6; the range of variation in *olivaceus* is about 33.0–36.0, whereas in specimens of *R. s. apache* Jenks, 1935, from the east slope of the Cascade Range, Sierra Nevada, and high mountains of southern California it is about 35.5–37.5. The kinglets summering in San Diego County are presumably *apache*, however, and this subspecies likely contributes winter visitors as well.