## California Wildlife Habitat Relationships System

# California Department of Fish and Wildlife California Interagency Wildlife Task Group

PYGMY NUTHATCH Sitta pygmaea

Family: SITTIDAE Order: PASSERIFORMES Class: AVES

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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

A common resident in mature ponderosa pine, Jeffrey pine, mixed conifer, eastside pine, and pinyon-juniper habitats in the Sierra Nevada, Cascades, Trinity, Warner, and White Mts. A separate subspecies (Grinnell and Miller 1944) breeds locally in closed-cone pine-cypress, Douglas-fir, and redwood habitats along the coast from Mendocino Co. south to San Luis Obispo Co. In southern California, restricted to mountain ranges west of the deserts. Winter dispersal is erratic; occurs rarely on southern coast in winter, and casual in desert regions. There are no records for the Channel Islands (Garrett and Dunn 1981). Recorded as vagrant in interior lowlands (McCaskie et al. 1979).

### SPECIFIC HABITAT REQUIREMENTS

Feeding: Eats mostly insects and spiders during breeding season. Also eats pine seeds in other seasons. Gleans from cones and new shoots of pines, usually high in trees. Probes and hammers cones for seeds. Occasionally flycatches. Caches seeds in crevices (Bent 1948).

Cover: Mature conifers in forests provide cover. In winter, roosts communally in tree or snag cavity, apparently an adaptation to cold weather.

Reproduction: Pair excavates a nesting cavity in a snag or stump. In Sierra Co., nest tree height averaged 6.5 m (20 ft), range 3.2 to 19 m (10-58 ft). Nest hole height averaged 5 m (15.5 ft), range 2.2 to 9.5 m (7-30 ft). Nest tree dbh averaged 46 cm (18 in), range 27.5 to 95 cm (10.8 to 37 in) (N = 28) (Raphael and White 1978, 1984).

Water: No additional information found.

Pattern: Frequents mature stands of conifers with open to dense canopy.

#### SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Mostly a resident in California. Not migratory, but there may be erratic winter dispersal.

Home Range: No data found.

Territory: Territorial during breeding season, not in winter (Bock 1969). In Marin Co., territory varied from 0.8-1.3 ha (1.9-3.3 ac) and averaged 1.1 ha (2.7 ac) (Norris 1958). Haldeman et al. (1973) reported 26 breeding pairs per 40 ha (100 ac) in ponderosa pine forests, and 4 pairs per 40 ha (100 ac) in fir-pine-aspen forests in Arizona. Norris (1958)

summarized 7 studies in California, Colorado, and Mexico; density averaged 19.5 males per 40 ha (100 ac), range 5.3 to 33 males per 40 ha (100 ac). Density in Sierra Co. conifer forests varied from 13-36 pairs per 40 ha (100 ac) from 1948 to 1976 (Raphael and White 1978, 1984).

Reproduction: Breeds from mid-April to mid-August, with peak in June. Lays 4-9 eggs, usually 6-8. Incubation 15-16 days, by female. Male feeds female on and off nest. Altricial young tended by both parents, and often other male helpers. Nestling period 20-21 days; young fed an additional 25-28 days outside nest (Harrison 1978).

Niche: Preyed upon by accipiters, snakes, and small mammals.

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