

California Wildlife Habitat Relationships System
California Department of Fish and Wildlife
California Interagency Wildlife Task Group

WHITE-BREASTED NUTHATCH

Sitta carolinensis

Family: SITTIDAE

Order: PASSERIFORMES

Class: AVES

B362

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

A common resident in many woodland habitats throughout the state, but especially in hardwood and hardwood-conifer habitats dominated by oaks. Breeds and winters in all major mountain ranges, including the White Mts. and Warner Mts., but mostly excluding ranges in the southeastern deserts. Also breeds in coastal oak woodlands from the Oregon border to southern California, east of the humid coastal belt. There is downslope and southerly movement from northern areas in winter, and postbreeding wandering in other parts of the state. Rarely wanders to southern desert areas. Has been found as high as 3350 m (11,000 ft.) following breeding at lower elevations.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Mostly eats insects and spiders during breeding season. Also eats acorns and large seeds in other seasons. Gleans from trunks and branches of live trees and snags. Stores acorns and seeds for winter, and defends these food caches (Bent 1948).

Cover: Large trees and snags in oak woodlands, pine-oak woodlands, pine and fir forests, pinyon and juniper woodlands, and riparian habitats provide cover. Roosts in tree or snag cavity.

Reproduction: Nests in cavity in tree or snag. Usually excavates own cavity, but uses old woodpecker hole occasionally; can excavate only in well-decayed wood. In Sierra Co., mean nest tree height averaged 10.8 m (33.5 ft), range 2.3-26 m (7.2-80 ft); nest hole height averaged 6.0 m (18.6 ft), range 1.2-20 m (4-61 ft). Mean dbh of nest tree was 64 cm (25 in), range 36-138 cm (14-54 in) (Raphael and White 1978, 1984). Appears to wipe nest hole entrance with insects; function unknown (Kilham 1968).

Water: In coastal California, seldom drinks water (Williams and Koenig 1980).

Pattern: Frequents oak woodland habitats throughout range. Also uses woodlands lacking oaks. Large trees and snags required.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Some movement upslope in late summer and downslope in winter. Seldom recorded in southern deserts or on Channel Islands. Apparently not a latitudinal migrant in California; there is only 1 record (10-11 Oct.) on South Farallon Islands (DeSante and Ainley 1980).

Home Range: Probably equal to territory, or larger.

Territory: In New Hampshire, Kilham (1972) reported territory averaged 15 ha (37 ac). Fitch (1958) reported 1 territory of 15 ha (37 ac) in Kansas. In Colorado, Hering (1948) reported foraging territory of 2 breeding pairs as 0.7 and 0.9 ha (1.7 and 2.3 ac). Butts (1931) reported breeding density of 4.6 pairs per 40 ha (100 ac) in New York, and winter territory of about 10 ha (25 ac). Stallcup (1968) recorded average annual density of 3.9-7.1 per 40 ha (100 ac) in Colorado. Breeding density in the Sierra Nevada, taken from American Birds (1948-1976) included 9-38 pairs per 40 ha (100 ac) (avg 22, N = 3) in oak woodland, 5-15 pairs per 40 ha (100 ac) (avg 12, N = 3) in riparian, and 1.2-3.5 per 40 ha (100 ac) (avg 2.4, N = 3) in coniferous forests (summarized by Raphael and White 1978).

Reproduction: Solitary and monogamous; breeds from mid-March to late July, with peak in May. Single brooded; clutch averages 6-7 eggs, range 5-9. Incubation about 12 days, by female, fed by male. Altricial young fed by both parents for 2 wk after leaving nest (Harrison 1978).

Niche: Subject to the same predators as other forest-dwelling passerines: accipiters, snakes, domestic cats, and small mammals.

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of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.