## California Wildlife Habitat Relationships System

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

BELL'S VIREO Vireo bellii

Family: VIREONIDAE Order: PASSERIFORMES Class: AVES

B413

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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Formerly a common and widespread summer resident below about 600 m (2000 ft) in western Sierra Nevada, throughout Sacramento and San Joaquin valleys, and in the coastal valleys and foothills from Santa Clara Co. south. Also was common in coastal southern California from Santa Barbara Co. south, below about 1200 m (4000 ft) east of the Sierra Nevada, in Owens and Benton valleys, along Mojave River and other streams at western edge of southeastern deserts, and along entire length of Colorado River (Grinnell and Miller 1944). Has declined drastically or vanished entirely throughout California range in recent decades, apparently from cowbird parasitism and habitat destruction and degradation (Goldwasser et al. 1980). Two races occur in California. V. b. pusillus (endemic to California and northern Baja California) is now a rare, local, summer resident below about 600 m (2000 ft) in willows and other low, dense valley foothill riparian habitat and lower portions of canyons mostly in San Benito and Monterey cos.; in coastal southern California from Santa Barbara Co. south; and along the western edge of the deserts in desert riparian habitat. In 1977-78, 67 males or paired individuals were counted at 23 of 65 sites surveyed on the coastal slope of southern California, and 23 at 9 of 18 sites on the desert slope (Goldwasser et al. 1980, Garrett and Dunn 1981). V. b. arizonae now is a rare summer resident along the Colorado River from Needles, San Bernardino Co., south to Blythe, Riverside Co. Bell's vireo (race uncertain) also breeds in at least 2 sites along Amargosa River near Tecopa, Inyo Co. (Gaines 1977c, Garrett and Dunn 1981).

#### SPECIFIC HABITAT REQUIREMENTS

Feeding: Gleans insects from foliage and branches, usually within 2.5 m (8 ft) of ground. Eats some fruits (Bent 1950).

Cover: Thickets of willow and other low shrubs afford nesting and roosting cover.

Reproduction: Builds an open-cup nest of pieces of bark, fine grasses, plant down, horse hair. Nest often placed on slender branch of willow, other shrub, mesquite, or other small tree, usually 0.6-0.9 m (2-3 ft), but sometimes 0.3-3.0 m (1-10 ft), above ground.

Water: Usually found near water, but also inhabits thickets along dry, intermittent streams.

Pattern: Inhabits low, dense riparian growth along water or along dry parts of intermittent streams. Typically associated with willow, cottonwood, baccharis, wild blackberry, or mesquite in desert localities.

### SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Usually arrives from Mexican wintering areas by end of March, and departs by end of August.

Home Range: In Indiana, Nolan (1960) reported a home range of 0.8-1.2 ha (2.0-3.0 ac). In breeding season, home range probably equal to territory. In Illinois, Pitelka and Koestner (1942) reported 1 pair per 1.2 ha (3 ac), and Hensley (1950) reported 1 pair per 1.3 ha (3.1 ac). In Arizona mesquite thickets, Barlow et al. (1970) found 1 pair per 0.8 ha (2 ac).

Territory: In Kansas, Barlow (1962) reported average territory of 0.5 ha (1.25 ac), range 0.1-1.3 ha (0.26 to 3.1 ac).

Reproduction: Peak egg laying May into early June. Monogamous. Clutch averages 4 eggs (range 3-5). Incubation 14 days, by both sexes. Both sexes care for altricial young, which usually fledge 11-12 days after hatching (Pitelka and Koestner 1942, Hensley 1950, Nolan 1960, Barlow 1962).

Niche: Frequently parasitized by cowbirds. Eggs lost to snakes and cats (Bent 1950, Nolan 1960, Cink 1977).

Comments: Numbers so low that may be nearing extinction in California. V. b. arizonae is California Endangered. V. b. pusillus is Federal Endangered and California Endangered (California Department of Fish and Game 1989).

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