

## **VIRGINIA'S WARBLER**

*Vermivora virginiae*

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**Management Status:** Federal: None  
California: Species of Special Concern (CDFG, 1998)

### **General Distribution:**

This southwestern relative of the Nashville Warbler (*V. ruficapilla*) is endemic to the western United States, breeding from eastern California, Nevada, southern Idaho, southwestern and central Wyoming, and Colorado (exclusive of the plains regions) south through Utah, Arizona (except southwest), and New Mexico to western Texas (Dunn and Garrett 1997, AOU 1998). It winters mainly in western Mexico south to Oaxaca, with sight records as far south as Belize and Guatemala (Dunn and Garrett 1997). Migrants are noted in small numbers through most of the southwest, with the bulk of the migration occurring east of the Colorado River Valley (Rosenberg et al. 1991). A few are found as far west as the coast of California, with most occurring in the fall (Garrett and Dunn 1981). Vagrants have been noted as far from the normal range as Labrador, Canada, and the Bahama Islands (Dunn and Garrett 1997).

This species is a rare breeder in California, occurring primarily in the Great Basin region, from the White Mountains and locally on the eastern slope of the Sierra Nevada of Mono and Inyo counties, south to the higher ranges of the east Mojave Desert: Clark Mountain (2-4 pairs according to Remsen 1978), and the New York Mountains, San Bernardino County (Garrett and Dunn 1981). A few pairs breed in the eastern San Bernardino Mountains (especially the upper Arrastre Creek drainage; Garrett and Dunn 1981), and at least one pair has been confirmed nesting in the northeastern San Gabriel Mountains (*American Birds* 40(5):1256, 1986).

Virginia's Warblers are very rare spring migrants through southern California, and, although still very uncommon, are somewhat more numerous in fall (Garrett and Dunn 1981). Spring records are mostly from mid-April through late May, and fall migrants are generally found from mid-August through early October. Along the lower Colorado River there are fall records as early as 23 July and as late as 2 November (Rosenberg et al. 1991). A few have wintered in coastal southern California (Garrett and Dunn 1981), and exceptionally in the southeastern portion of the state, south of the Mojave Desert (McCaskie 1989).

### **Distribution in the West Mojave Planning Area:**

Virginia's Warblers do not breed in the WMPA, although a few pairs have been documented breeding just outside the periphery of the area. The upper Arrastre Creek drainage nesting sites at an elevation of 7220-7875 ft. (2200-2400 m) are about 4.5 miles (7 km) south of the northeastern San Bernardino National Forest boundary. The one documented site in the San Gabriel Mountains, near the intersection of Blue Ridge Rd.

and the Angeles Crest Hwy. at an elevation of 6890 ft. (2100 m), is about 3.5 miles (5.5 km) south of the northern boundary of the Angeles National Forest.

This species occurs as a rare transient through the WMPA. Los Angeles County Museum files include nine records for the Lancaster area of the Antelope Valley; all are for fall, from 25 August to 2 October (with six from September). This seasonal pattern probably holds throughout the WMPA. The numerous records for Kern Co. (e.g., California City, Mojave, Galileo Hill, Cantil) are nearly all for fall (M. T. Heindel, pers. comm); perhaps as few as two of the several claimed spring records for Kern County can be considered valid (M. T. Heindel, pers. comm.). Files at the Joshua Tree National Park headquarters list six sightings of Virginia's Warblers between 1964 and 1985 for the park, all in spring, but only one (12 April 1982) includes a convincing description. Among the few valid spring records for the WMPA was one at Twentynine Palms 26 April 1994 (American Birds 48(3)). In San Bernardino County one was northwest of Silverwood Lake at the intersection of Hwy. 138 and Hwy. 173 on 9 September 1972 (K. L. Garrett pers.obs.); additional records undoubtedly occur for other sites in the San Bernardino County portion of the WMPA. It has been recorded as late as October at China Lake Naval Weapons Station (CNDDDB).

### **Natural History:**

Virginia's Warblers are small (4.5 in., 11.5 cm) insectivorous songbirds, which are primarily gray in plumage. All plumages show a greenish yellow rump and upper tail coverts and bright yellow undertail coverts. Adult males have a large (but variable) patch of yellow on the breast and a chestnut crown patch, which is usually concealed. Adult females and immatures show less (or no) yellow on the breast and the crown patch is reduced or absent. This warbler frequently bobs its tail in a down-up motion, a behavior shared with the western subspecies (*Vermivora ruficapilla ridgwayi*) of the closely related to the Nashville Warbler (Dunn and Garrett 1997). Dull immature female Nashvilles with reduced yellow on the underparts and olive-gray upperparts are often mistaken for Virginia's Warblers; Virginia's is distinguished in all plumages by the lack of any olive on the gray wing coverts and flight feather edges (Dunn and Garrett 1997).

Virginia's Warblers forage actively by gleaning adult and larval insects from twigs and leaves. Most foraging is in brush and the lower portions of trees; territorial males may sing from high in trees. Migrants are usually noted foraging in low brushy or weedy habitats, especially in fall (Dunn and Garrett 1997).

The nest is a woven cup placed on the ground on a steep slope, and concealed by vegetation (Dunn and Garrett 1997). Clutch size varies from three to five, but is typically three (Ehrlich et al. 1988).

### **Habitat Requirements:**

This is a warbler of rather open montane woodlands with much brushy understory, especially on slopes. Occupied habitats are often rather arid. Dominant brushy species in breeding habitats include mountain mahogany (*Cercocarpus betuloides*), serviceberry (*Amelanchier* spp.), manzanita (*Arctostaphylos* spp.), currant (*Ribes* spp.), snowberry (*Symphoricarpos* spp.), and scrub oak (*Quercus* spp.). Intermixed trees may include various conifers, including pinyon pines (*Pinus monophylla*), ponderosa pines (*P.*

*ponderosa*), douglas fir (*Pseudotsuga menziesii*), white fir (*Abies concolor*), Gambel oak (*Quercus gambeli*), California black oak (*Q. kelloggi*), and aspen (*Populus tremuloides*) (Dunn and Garrett 1997).

Migrants along the coast of California are often noted in patches of exotic fennel (*Foeniculum vulgare*) or tree tobacco (*Nicotiana glauca*; Garrett and Dunn 1981). Migrants through the desert can be found in almost any habitat where migrant insectivorous songbirds are concentrated, including riparian groves, shade plantings around towns, parks, or ranchyards, and occasionally microphyll woodlands.

### **Population Status:**

Virginia's Warblers breed only in small numbers in California; the species' placement on the California Bird Species of Special Concern list (Remsen 1978) reflects its limited breeding distribution and population size in the state and potential threats from breeding habitat destruction.

Some or most breeding populations in California have perhaps become established only during the latter half of the present century (Johnson and Garrett 1974). Grinnell and Miller (1944) did not record breeding birds away from Clark Mountain and, possibly, Mono County.

### **Threats Analysis:**

Remsen (1978) considered the greatest potential threat to California breeding populations to be habitat destruction, especially through forest fires. Increasing human recreation and density in montane woodlands and brushlands suggests a growing potential for catastrophic fires in Virginia's Warbler habitat. Dunn and Garrett (1997) noted that populations are generally stable, and that cowbird parasitism, while recorded, does not appear to have significantly impacted this species.

### **Biological Standards:**

Remsen's (1978) recommendation for management of this species in California is to maintain the integrity of breeding habitat. Breeding habitat within the WMPA is marginal, at best, although suitable habitat lies within the Angeles and San Bernardino National Forests just outside the area.

Transients through the WMPA most often occur, like most migrant passerines, at sites providing adequate water, food and shelter such as riparian groves, desert woodlands, landscaped parks and wooded ranchyards. Such sites, particularly natural riparian areas and woodlands, should be preserved. Because Virginia's Warblers forage largely in shrubby habitats and woodland understory during migration, such vegetation layers should be preserved in WMPA riparian habitats; in some cases this might require a reduction or curtailment of livestock grazing activity. The availability of pools, springs, or flowing water in riparian habitats is important to passerine migrants in general, and should not be compromised at WMPA riparian sites.

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