

Least Bell's Vireo (*Vireo bellii pusillus*)

Population:

Grinnell and Miller (1944) once characterized Least Bell's Vireo as one of the most common birds found in riparian habitat throughout the state (Figure 5-7). Over the past sixty years, destruction of riparian habitat and the invasion of California by the parasitic Brown-headed Cowbird have contributed to a steep decline in the vireo's population. Currently, Least Bell's Vireos are restricted to approximately eight counties in southern California and are on the federal Endangered Species List (USFWS 1998).



Photo by James Callaghan, Sea and Sage / Audubon

To be reclassified as “threatened,” the Least Bell's Vireo population must achieve one of the following criteria for at least a period of five consecutive years (taken from USFWS 1998):

- Stable or increasing populations/metapopulations, each consisting of several hundred or more breeding pairs, are protected and managed at the following sites: Tijuana River, Salzura Creek/Jamul Creek/Otay River, Sweetwater River, San Diego River, Camp Pendelton/Santa Margarita River, Santa Ana River, an Orange County/Los Angeles County metapopulation, Santa Clara River, Santa Ynez River, and an Anza Borrego Desert metapopulation.
- Stable or increasing Least Bell's Vireo populations/metapopulations, each consisting of several hundred or more breeding pairs, become established and are protected and managed at the following sites: Salinas River, a San Joaquin Valley metapopulation, and a Sacramento Valley population.
- Threats are reduced or eliminated so that Least Bell's Vireo populations/metapopulations listed above are capable of persisting without significant human intervention, or perpetual endowments are secured for cowbird trapping and exotic plant control in riparian areas occupied by least Bell's Vireos.

MANAGEMENT

Habitat enhancement:

Riparian habitat creation and restoration is underway throughout the state. Much of this effort in southern California has been propelled by the need for more Bell's Vireo habitat. Bell's Vireos have responded favorably to restoration efforts, demonstrating increases in occupation at restored sites, and nest success rates similar to non-restored natural habitat (Kus 1998).

The Santa Clara River Enhancement and Management Plan:

This plan seeks to protect the ecological integrity of the longest, unchannelized river in the South Coast bioregion. Current efforts to develop along the Santa Clara and its tributaries may endanger the integrity of the plan.

Brown-headed Cowbird control:

In the short-term, trapping of cowbirds is one of the most effective ways to increase the reproductive success of Least Bell's Vireo on a local scale. At Camp Pendleton, nest parasitism dropped from 47% to less than 1% in less than 10 years (USFWS 1998). However, cowbird trapping is only a temporary remedy to be used in emergency situations. The population cannot be considered healthy until it can survive without significant human intervention.

Monitoring and research:

Research elucidates the habitat variables required to re-establish healthy populations. Monitoring provides important information on population trends, allowing for the employment of appropriate adaptive conservation techniques.

Willow Flycatcher (*Empidonax traillii*)**Population:**

Willow Flycatchers historically nested throughout California, preferring riparian deciduous shrubs, particularly willow thickets. Currently, three subspecies of the Willow Flycatcher breed in California (Figure 5-5). Each has been listed as state endangered and US Forest Service Region 5 Sensitive in California. The USFWS designated the Willow Flycatcher as a sensitive species in Region 1 (Washington, Oregon, Idaho, California and Nevada). Furthermore, the Southwestern Willow Flycatcher (*Empidonax traillii extimus*) is federally listed as endangered.

Management:

Sierra Nevada populations have dropped precipitously in the last 50-60 years. Most Sierran meadows are already publicly owned, but many are grazed under permit. Goals for increasing Willow Flycatcher populations focus on increased monitoring, improving management and restoration of habitat, and where necessary, through proper grazing management.



Photo by James Gallagher, San and Sage Audubon

Southwestern Willow Flycatcher:

These flycatchers are concentrated in lowland habitats. The USFWS has recently released a Southwest Willow Flycatcher Recovery Plan (<http://ifw2es.fws.gov/Library/ListDocs.cfm>) that details management recommendations for this imperiled subspecies. Managers should prioritize the protection and restoration of riparian deciduous shrub vegetation and address the problem of cowbird parasitism, which has severely affected populations in southern California. For example, at the South Fork Kern River Preserve, an average of 63.5% of nests were parasitized from 1989 to 1992, with a range from 50% in 1989 to 80% in 1991. However, Brown-headed Cowbird trapping at the South Fork Kern River Preserve has resulted in a decreased rate of parasitism, “buying time” for this population as riparian habitat restoration proceeds.