

Migratory Birds and Riparian Species of Concern

Importance of Riparian and Chaparral Habitat

Riparian and chaparral ecosystems along the coast of central California provide vital habitat for many migratory and native animal species. The Los Padres National Forest is home to several species of federally endangered or listed migratory birds, amphibians, and fish including the Southwestern Willow Flycatcher, the California red-legged frog, and Steelhead trout.

Unfortunately, over the last few decades important breeding habitat has been eliminated or converted for human use such as agriculture and housing. This regional decline across the west is associated with the decline of each species of concern in Los Padres National Forest. Other drivers of population decline are invasion of nonnative plant species, water diversion, poor livestock management, and recreational development.

Migratory Birds of Concern

Los Padres National Forest is home to at least three listed migratory bird species.

Vireo bellii pusillus, the Least Bell's Vireo, is a small North American songbird originally



found throughout California and Northern Mexico. Today, the Least Bell's vireo has been sighted in scattered populations along the coast of central and southern California. The species was federally listed as endangered in 1986 mainly due to habitat loss and nest-parasitism by brown-headed cowbirds.

Empidonax traillii extimus, the Southwestern Willow Flycatcher is another small songbird found in Los Padres National Forest. It historically ranged from California, Arizona, Colorado, Texas, and Utah; however, like the Least Bell's vireo, this Flycatcher's population has been reduced to patchy locations in coastal California in response to habitat loss and nest parasitism. It was federally listed as endangered in 1995.



The third migratory bird of concern, *Coccyzus americanus*, the Western Yellow Billed Cuckoo is the largest of the three species of concern. This species was listed as threatened in 2001 due to conversion of riparian habitat for human consumption and perhaps toxicity from pesticide use in adjacent agriculture.



These avian species of concern prefer to inhabit riparian and chaparral regions with large, dense stands of native willow and cottonwood. Each species requires stands to be of certain height and density for successful reproduction to occur. Without proper vegetation, these birds must migrate elsewhere to find an appropriate nesting site.

Other Species of Concern

Like migratory birds, aquatic animals in Los Padres National Forest are very sensitive to changes in the ecosystem. Invasive species, habitat loss, and water diversion for agriculture and housing are major issues for numerous amphibian and fish species in the central valley. In recent decades many



species have been listed as endangered species in order to preserve them from extinction. These animals include the California red-legged frog (left),



Western Pond Turtle, Arroyo Toad (above), and Steelhead Trout.

Fire Impacts on Endangered Animals

Large, catastrophic fires such as the 2007 Zaca fire can adversely impact bird habitats by removing riparian vegetation and

by changing the hydrology of stream beds during flooding events post-fire. High intensity crown-fires associated with chaparral and riparian habitats



completely eliminate vegetation rather than leaving behind slightly-singed trees. Such fires destroy important native willows and cottonwoods that migratory birds of concern require for reproduction, as well as alter water quality and flow regimes that make up a healthy ecosystem.

Following the Zaca and more recent California wildfires, it is important to understand wildfire and animal dynamics and use this knowledge to implement chaparral restoration in regions of critical need. Important steps include expanding our knowledge about fire ecology in California's chaparral ecosystems, training citizen scientists to monitor species of concern, removing invasive plant, and restoring native plants. By conserving these species, we may maintain the quality and health of the Los Padres National Forest.