

Two Rare Song Birds

A species of bird, which has been at Lake Hodges for thousands of years, could disappear without creating a connection to other habitat.

By Jason Lopez, Resources and Trails Manager, San Dieguito River Park.



Female Coastal Cactus Wren, Bernardo Mountain 2014. Photo Courtesy of Ken Weaver.

There are two important song birds that live, year round, along the North Shore Trail. They live and breed just off trail in the sparsely vegetated south facing slopes of Bernardo Mountain, which is located on the North Shore of Lake Hodges. One species has proven to be resilient and the other fragile.

Coastal Cactus Wren and *California Gnatcatcher* have been formally studied at Bernardo Mountain since 1981. A current survey of the birds revealed a disturbing downward trend in the cactus wren population. The population decline has been exacerbated by the 2007 Witch Fire and several years of drought. A new fire would be devastating and could result in the loss of the entire population. More study is needed, but there may only be 6-8 birds remaining in the entire Lake Hodges area.

Conversely, the *California Gnatcatcher* population seems to be stable. Although the current numbers are generally low, this seems to mirror past population fluctuations according to biologist. The fire and

drought have made life difficult for all terrestrial birds on Bernardo Mountain. The study also demonstrated that the restoration efforts of the San Dieguito River Park (SDRP) have helped the gnatcatchers of Bernardo Mountain immensely. The rehabilitated habitat helped the fire survivors to not only survive the drought but to become a dominant bird species of the preserve.

The River Park is fortunate to have partnered with biologist Clark Mahrtdt and Ken Weaver to conduct the 2014 study. Both biologists have a long history of working in the area. Clark has been studying the habitat and wildlife at Lake Hodges and Del Dios Gorge for over 35 years and has been a River Park volunteer since the early 1990's. Ken Weaver first started documenting cactus wren at Lake Hodges in 1981 and is considered to be an expert for this species. Clark and Ken are dedicated to the conservation of *Coastal Cactus Wren* and *California Gnatcatcher*.

The purpose of the study was to provide an update as to the fate of the bird populations of Bernardo Mountain including comparing the results of previous surveys. The post-fire restoration, that was designed to provide immediate benefits to wildlife, was also evaluated.

Just after the 2007 fire, referring to the Lake Hodges area, Jerre Stallcup from *Conservation Biology Institute* wrote:

"We are facing the very real potential for local extirpation of populations of gnatcatchers and cactus wrens, 2 of the 3 focal species initially prioritized by the State of California's Natural Community Conservation Program (NCCP) in Southern California."

In response to the desperate need for action, the River Park embarked on a restoration project to create *Coastal Cactus Wren* and *California Gnatcatcher* habitat on Bernardo Mountain. The 67-acre restoration project occurred on land owned by the City of San Diego, San Dieguito River Park JPA, and the San Dieguito River Valley Conservancy.

Prior to the 2007 Witch Fire, Lake Hodges is believed to have supported the largest population of *California Gnatcatcher* in San Diego County. In 2014, the



SDRP restoration site March 2011

biologists detected 12 pairs of gnatcatchers on Bernardo Mountain. The general distribution of territories was similar to the results of a 2008 study which identified the survivors of the Witch Fire. Eleven of 12 pairs were utilizing burned areas that received some level of restoration work by SDRP after the fire. Six of the pairs had more than half their territories located within the SDRP restorations sites.

Unfortunately, the results of the study demonstrate the dire outlook for the survival of *Coastal Cactus Wren* at Lake Hodges. Only 3 pairs of cactus wren were observed and apparently Bernardo Mountain contains the only population remaining at Lake Hodges. Cactus wren require mature cactus patches, which is reasonable considering they must contend with predators like the *Greater Roadrunner* and *Coopers Hawk*. The cactus planted in the 2008 post fire restoration work is not yet tall enough to provide nesting habitat and will not be for 2-4 more years. The cactus wren may be utilizing the restorations sites for foraging. For the current survey, only one nest was found to definitely contain young.

Cactus wren populations are fragile and the bird does not seem to like to travel very far. It is likely that the Bernardo Mountain population may be confined to Lake Hodges. The fate of this song bird, which has lived in the vicinity of what is now Lake Hodges for thousands of years, is up to three remaining pair of cactus wren.

There are cactus wren in San Pasqual Valley, near Safari Park, but connecting the populations is a project that has significant obstacles, including Interstate 15, and if started today, would take 8-10 years before the cactus provided adequate habitat. Although difficult, making the connections to other occupied habitat is ultimately needed for the long term survival of the Bernardo Mountain population.

SDRP will continue to restore habitat on Bernardo Mountain and encourage Park partners to devote time and energy in solving the cactus wren dilemma.

The first SDRP restoration project for these rare song birds began in 2004 and SDRP annually implements a restoration project on Bernardo Mountain. The Park also looks for opportunities for outside funding and partnerships.

In 2014, SDRP worked with the *Institute of Conservation Research (ICR)* to plant 1,000 cactus on Bernardo Mountain to help create more cactus scrub habitat in areas that SDRP identified as important. In addition to cacti, ICR is helping the wildlife at Lake Hodges by installing coastal sage scrub plants, mostly in the Bernardo Bay area.

In 2015, SDRP will enhance the current effort to save cactus wren and gnatcatchers, by implementing a 4-year project funded by a *Natural Resources Conservation Service* grant. The project will help to convert weedy areas into wildlife habitat.

Overall, the restoration projects will help most animals that require coastal sage scrub habitat, including the resident song birds, but cactus grows slow and the clock is ticking for the Coastal cactus wren of Bernardo Mountain.

If you want to volunteer or contribute to the *Coastal Cactus Wren Fund* please visit www.sdrp.org or call (858) 674-2275.