

29. Fisherman's Camp (Burke 1992b, Phillips 1998c)

Location

This established RNA is located on the San Bernardino National Forest, San Bernardino County. It is approximately 4.5 miles (7.2 km) due E. of the town of Lake Arrowhead and 1.5 miles (2.4 km) N. of Running Springs. The RNA lies within the Arrowhead Ranger District. Its boundaries include portions of sections 20 and 29 of T2N, R2W (34°14'N., 117°06'W.), USGS Keeler Peak quad (fig. 60). Ecological subsection – Upper San Gorgonio Mountains (M262Bh).

Target Element

Coulter Pine (*Pinus coulteri*)

Distinctive Features

This RNA contains an unusual coulter pine (*Pinus coulteri*) forest with a large number of associated tree species. Coulter pine is typically found in association with chaparral throughout the San Bernardino Mountains, but here it codominates with either canyon live oak (*Quercus chrysolepis*) or California black oak (*Quercus kelloggii*). In addition to the *Pinus coulteri*-*Quercus chrysolepis*-*Quercus kelloggii* forest, species common to ponderosa pine (*Pinus ponderosa*) forest (fig. 61) are also present throughout the RNA, particularly at the N. end.

Rare Plants: *Streptanthus bernardinus* (CNPS List 1B) is found among the sparse herbaceous vegetation on dry, powdery slopes in the Coulter pine-westside ponderosa pine forest association. *Castilleja montigena* and *Lilium humboldtii* (both CNPS List 4) were tentatively identified at the site.

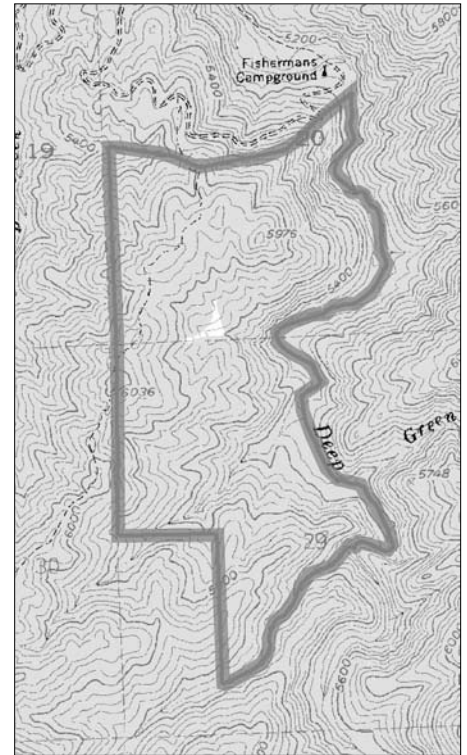
Rare Fauna: The RNA includes spotted owl (*Strix occidentalis* ssp. *occidentalis*, California species of special concern) territory. It also harbors the southern rubber boa (*Charina bottae umbratica*, State-listed threatened species, Forest Service-listed sensitive species) and the San Diego horned lizard (*Phrynosoma coronatum blainvillei*, California species of special concern). Additional rare species may be found in the RNA if a formal wildlife survey is conducted.

Fire History: A policy of fire suppression has been in place in the San Bernardino Mountains since the early 1900s. No fire within the boundaries of the RNA has been recorded since 1980. Long-time residents in the area recall a fire on the ridge in the late 1950s. Coulter pines are considered a fire-adapted species, and although possessing closed cones, they do not require fire to open them. The cones, requiring 2 years to mature, open in late winter (January-February), which may help protect seeds from summer and autumn fires.

Physical Characteristics

The area covers 431 acres (172 ha) with an elevation of 5020-6036 ft (1530-1841 m). The area consists generally of a N.-S. trending ridge and the E. exposure slopes extending to the adjoining stream. The topography can be quite rugged where streams cut steep-sided canyons through the upland surface. The slopes range from 5° (9 percent) (portions of ridgetop) to 38° (78 percent) (above Deep Creek).

The RNA is mapped as a single quartz monzonite (Mesozoic plutonic rock known as the Pleasant View Ridge quartz monzonite) of Cretaceous or Jurassic age. Detailed soil inventories of RNA are not available. A reconnaissance inventory was compiled using photointerpretation; however, the resolution of the mapping is low (minimum mapping area is about 100 acres [40 ha]). Based



**Figure 60—
Fisherman's Camp
RNA**

on this information, the RNA is mapped as a single soil type: the Wapi-Pacifico families-Rock outcrop complex. This complex occurs on 50-75 percent (27-37°) slopes and is a soft, shallow, sandy loam with a fine to very fine granular structure. The surface soils are 0-7 inches (0-18 cm) deep. Danger of erosion is very high. Rock outcrops comprise about 15 percent of the complex and are found intermixed with the soft, powdery loam.

General climate in the region is Mediterranean. The year-round weather station nearest the RNA is the Lake Arrowhead fire station (34°15'N., 117°11'W. at 5210 ft [1585 m]). The average annual precipitation at Lake Arrowhead is 40.17 inches (1022 mm). Snowfall averages 61 inches (155 cm) per year. Average temperatures range from 38 to 68 °F (3-20 °C), with extremes ranging from a winter low of 8 °F (-13 °C) to a summer high temperature of 106 °F (41 °C). High elevations and cool temperatures result in a short growing season between mid-June and mid-September – about 100 frostfree days per year.

Association Types

Coulter Pine Forest/Westside Ponderosa Pine Forest (84140/84210): 365 acres (147 ha). The pine forest types overlap here to such a degree that it is difficult to map them as separate communities with discrete boundaries. They are, therefore, mapped as a single forest complex. The steep slopes of the RNA support a complex Coulter pine forest where codominance in the tree layer varies with slope and exposure. Coulter pine is present along the ridge and on the E. slopes, especially those with a S.-facing exposure. Other coniferous species sharing dominance with Coulter pine include white fir (*Abies concolor*) and sugar pine (*Pinus lambertiana*) on N.-facing slopes and ponderosa pine and Jeffrey pine (*Pinus jeffreyi*) on warmer, S.-facing slopes. Canyon live oak and black oak are also important components of this forest, occurring throughout the site but predominantly on the N. end.

Tree cover varies between 65 and 80 percent. Reproduction of all tree species appears good, and all age classes are present. Throughout much of the site, the forest has an open understory. Shrubs and herbaceous plants are few and scattered. They include *Arctostaphylos pringleii* var. *drupacea*, *Eriogonum saxatile*, *Lotus nevadensis*, *L. crassifolius*, and *Carex multicaulis*. Where the forest is particularly open and soils are dry, *Pteridium aquilinum* var. *pubescens* occurs in dense patches along with grass associates, including *Bromus ciliatus*, *B. tectorum*, and *Acnatherum latiglumis*. In particularly mesic areas, such as canyon bottoms, incense-cedar (*Libocedrus decurrens*) and mountain dogwood (*Cornus nuttallii*) – a rare riparian associate in the San Bernardino Mountains – occur among the other forest trees. Thimbleberry (*Rubus parviflorus*) is a common shrub on these cool, shady slopes.

White Alder Riparian Forest (61510): 66 acres (27 ha). A dense riparian forest occurs along the edges of Deep Creek and in the narrow canyons of intermittent tributaries. This vegetation adds greatly to the diversity of plants at the site and provides valuable habitat for many wildlife species. This association type is dominated by white alder (*Alnus rhombifolia*). The shrubby understory includes *Cornus sericea* ssp. *sericea*, *Rosa woodsii*, *Rhamnus californica*, *Rubus parviflorus*, and *Salix lasiolepis* amidst a dense herbaceous layer of annuals, perennials, and vines. These include *Clematis ligusticifolia*, *Aquilegia formosa*, *Artemisia douglasiana*, *Barbarea orthoceras*, *Erodium* spp., *Galium angustifolium*, *Geum macrophyllum*, *Gilia splendens*, *Lepidium virginicum* var. *pubescens*, *Juncus* spp., *Claytonia perfoliata* var. *perfoliata*, and *Urtica holosericea*. Grasses include *Agropyron parishii*, *Bromus carinatus*, and *B. tectorum*.

Plant Diversity

One hundred ten species of vascular plants are listed.

Conflicting Impacts

The San Bernardino Mountains are one of the more heavily visited mountain areas in the United States. However, the only current use and activity noted in the RNA is day hiking on the trail through the NW. corner, and this appears to have had little impact on the site. Logging was an important industry in this area in the mid 1800s, and physical evidence of this exists at the RNA in the form of old cables and logging chutes. Pine and fir were the most common trees logged in this area at that time.

Air pollution from the valley floor continues to be a significant hazard to coniferous species in this area.

Figure 61—Fisherman's Camp, open park-like Coulter pine forest – westside ponderosa pine forest complex covers much of the Fisherman's Camp RNA. Bare ground and boulder-filled canyons are common. (1989)

