

75. Sawmill Mountain (Parikh 1993b)



**Figure 151—
Sawmill Mountain
rRNA**

Location

The Sawmill Mountain recommended Research Natural Area is on Los Padres National Forest in N. Ventura and S. Kern counties. It lies immediately W. of Mount Pinos, SE. of Cerro Noroeste (Mount Abel), just W. of San Emigdio Mesa, and occupies parts of sects. 25 and 36 T9N, R22W; sects. 30 and 31 T9N, R21W; sects. 1, 2, 11, 12, 13, and 14 T8N, R22W; and sects. 7 and 17 T8N, R21W MDBM (38°48'N., 119°10'W.), USGS Sawmill Mountain quad (fig. 151). Ecological subsection – Northern Transverse Ranges (M262Bb).

Target Element

Jeffrey Pine (*Pinus jeffreyi*) Forest

Distinctive Features

The flora here is mainly derived from the Sierran forest of the West American element of the Arcto-Tertiary geoflora. The pine belt in S. California is similar to the S. Sierra Nevada: many of the high-elevation, montane species with disjunct distributions have affinities with the Sierran flora. Many other species present here are transitional between drier, interior desert flora and montane flora from wetter, cooler regions.

Rare Plants: *Monardella linoides* ssp. *oblonga* is on CNPS List 1B; *Delphinium parishii* ssp. *purpureum* (*D. parryi* ssp. *purpureum* in Hickman [1993]), *Frasera neglecta* (*Swertia* n. in Hickman [1993]), and *Lupinus elatus* are all on CNPS List 4.

Rare Fauna: The region is a part of the breeding habitat of the Federally- and State-listed endangered species California condor (*Gymnogyps californianus*).

Physical Characteristics

The area encompasses about 3800 acres (1539 ha). Elevations range from 6250 feet to 8750 feet (1905-2667 m) at the summit of Sawmill Mountain. Although many small peaks, high ridges, and rocky outcrops are included, the rRNA consists mainly of steep slopes, narrow drainages, seeps, springs, meadows, and some drier, wider washes. Grouse Mountain, W. of the summit, is also included. The rugged slopes of Sawmill Mountain drain N. to San Emigdio and Cuddy creeks and W. by way of Dry and Apache canyons to the Cuyama River. To the S., they drain by Lockwood and Piru creeks into the Santa Clara River.

The Mount Pinos mountains are granitic intrusive igneous and metamorphic rocks of the Mesozoic and, perhaps, the Precambrian Eras. The northernmost edge of the rRNA is composed of Precambrian to Mesozoic Pelona schists, and the N. slopes of Sawmill Mountain and its summit are made up of gneissic rocks of similar age, primarily banded biotite-quartz-feldspar gneiss with some granitic rocks. A vein and small outcrop of mylonitic rocks of the same age have been mapped in the N. part of the rRNA. These metamorphic rocks are covered in places by Quaternary landslide rubble of Pleistocene or recent Holocene epochs. Mesozoic or older granitic rocks are present in most of the area S. of the summit and in a small section N. of the summit.

The granitic bedrock has decomposed in most areas to form slightly acidic soils. Bedrock outcrops are evident on ridges, rises, and actively eroding sites. Soils belong to the Hades-Ginser-Ola families association, the Kilburn-Wrentham-Supan families association, and the Los Gatos-Kilburn-Panamint families association.

No climate data are available from the rRNA. Average precipitation in the S. California montane coniferous forest region ranges from 35 to 60 inches (89-152 cm), and the growing season is 3-7 months. Snowfall occurs at higher elevations and is often heavy; summer thundershowers also occur. Summit snow-depth records maintained by the Forest Service report averages of 32.4 inches (82.3 cm) of snow on March 1 and 18.2 inches (46.2 cm) on April 1. Average annual temperature in the area ranges from 50 to 60 °F (10-15 °C), with a large range in annual temperature.

Association Types

The point-centered quarter method was used to sample forest vegetation types.

Jeffrey Pine Forest (85100): No acreage is given. The target vegetation type, Jeffrey pine (*Pinus jeffreyi*) forest, occurs as a fairly homogenous, dense distribution of large trees (particularly large on slopes adjacent to drainages) with a varied understory at different locations (fig. 152). This species dominates drier slopes and S., E., and W. exposures, which receive more sunlight. Heights of trees range to 131 ft (40 m). Soils are generally finer than the denuded gravelly soils near the summit. White firs may occur rarely. Understory varies in density, and typical components are *Chrysothamnus vicidiflorus*, *Lupinus elatus*, *Ribes cereum*, and *Symphoricarpos parishii*. Annual species are present in spring and summer.

White Fir Forest (85320): No acreage is given. Fine and moist soils with a thick litter cover on steep and shady N. slopes are covered by white fir (*Abies concolor*) forest, with a lower, denser, and more closed crown cover than the Jeffrey pine forest. Tree height ranges up to 98 ft (30 m). The understory is generally not dense; it is composed of species such as *Delphinium parishii* ssp. *purpureum*, *Erysimum capitatum*, *Ribes cereum*, *Viola purpurea*, and a host of summer annuals.

Jeffrey Pine-White Fir Forest (85210): No acreage is given. Less steep N. slopes with E. and W. exposures are dominated by a mixed forest of Jeffrey pine and white fir. One or the other species dominates locally depending on soil moisture and exposure. The understory appears to be dominated by species from the Jeffrey pine forest type. Although limber pine (*Pinus flexilis*) occurs relatively frequently and with some abundance at Mount Pinos on N. slopes, it is found only occasionally at higher elevations in the Sawmill Mountain rRNA, on gently sloping, relatively open summit flats, outcrops, and ridges. Limber pine appears to be absent where overstory is dense and can be considered a rare component of both white fir forest and mixed Jeffrey pine-white fir forest at Sawmill Mountain.

Montane Meadow (45100): Montane meadow vegetation is found in washes, drainages, springs, seeps, depressions, and concave slopes in the Sawmill Mountain rRNA. The meadows vary in size depending on microtopography, generally contain fine soils, and are covered with *Juncus* spp., *Carex* spp., and *Eleocharis* spp. Creeks at lower elevations are edged with a plant association made up of *Cercocarpus ledifolius*, *Lupinus latifolius*, and *Salix lasiolepis*. Montane meadows of both wet (45110) and dry (45120) subtypes occur within the rRNA. Species occurring in the dry meadow habitats include *Equisetum laevigatum*, *Helenium bigelovii*, *Iris missouriensis*, and *Sisyrinchium halophilum*. Plants found in wet meadow, spring, and seep habitats include *Mimulus guttatus*, *M. moschatus*, *M. primuloides*, and *Potentilla glandulosa* ssp. *reflexa*. The overstory in most of these areas is dominated by Jeffrey pine.

Southern California Fell-Field (91130): No acreage is given. At the highest elevations near the summit of Sawmill Mountain where overstory tree species are very sparse, low subalpine fell-field cushion vegetation is found in gravelly

or rocky soil on gently sloping, open flats. Species include *Astragalus purshii* var. *tinctus*, *Calochortus invenustus*, *Eriogonum kennedyi*, and *Sitanion hystrix*, with scattered shrubby plants such as *Chrysothamnus vicidiflorus*.

Most locations in the Sawmill Mountain rRNA have an understory of scattered elements of rabbitbrush scrub and montane chaparral. Some species found here include *Chrysothamnus nauseosus* ssp. *mohavensis*, *C. vicidiflorus*, *Ribes cereum*, *Eriogonum* spp., *Lupinus elatus*, *Penstemon speciosus*, *Castilleja applegatei*, *Achillea millefolium* var. *lanulosa*, *Eriophyllum confertifolium*, and *Ceanothus cordulatus*. At elevations below 8000 ft (2438 m), scattered canyon live oaks (*Quercus chrysolepis*) begin to appear in the overstory of the Jeffrey pine forest. The oaks increase in abundance with decreasing elevations, where occasional one-needle pinyon (*Pinus monophylla*) also are found. This forest vegetation type of Jeffrey pines mixed with oaks and pinyon pines is particularly prevalent below 7500 feet (2286 m).



Figure 152—Sawmill Mountain, Jeffrey pine (*Pinus jeffreyi*) forest with an understory dominated by squaw current (*Ribes cereum*) (1992)

Plant Diversity

Ninety-three taxa are listed.

Conflicting Impacts:

The region has been mined for borates and gypsum in the past, but in general the potential for the presence of undiscovered mineral and petroleum resources is very low. The steep, rugged slopes of the rRNA probably preclude grazing altogether, and most recreational activities are restricted to the two main trails. Adverse impacts have not been observed at the area's two primitive campgrounds. An increase in mountain biking has been observed and should be discouraged in the area.