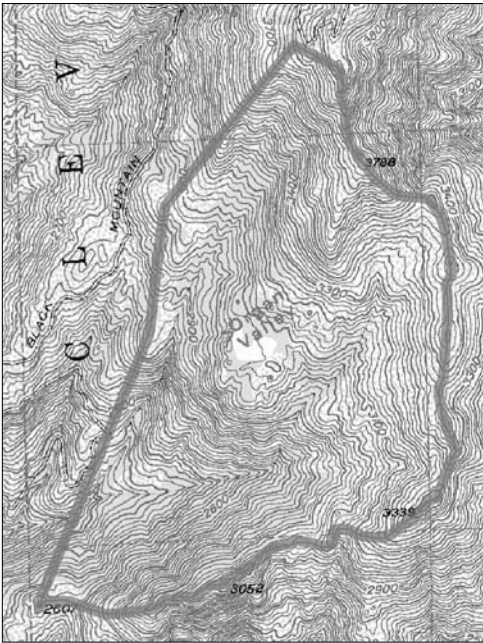


## 64. Organ Valley (Burke 1985, Martin 1990c)



**Figure 129—Organ Valley RNA.**

### Location

This established RNA is on the Cleveland National Forest and is about 8 miles N. of Ramona in San Diego County. The site includes portions of sects. 6, 7, 8, and 18 T12N, R2E SBBM (33°9'N., 116°49'W.), USGS Mesa Grande quad (*fig. 129*). Ecological subsection – Western Granatic Foothills (M262Bn).

### Target Elements

Engelmann Oak (*Quercus engelmannii*)

### Distinctive Features

**Rare Flora:** Several rare plant species occur in the area: *Senecio ganderi* (CNPS List 1B, State-listed rare species) and *Horkelia truncata* (CNPS List 1B) occur on Las Posas soil along the Black Mountain fuel break in the E. portion of the area. *Brodiaea orcuttii* is a member of CNPS List 1B and occurs as a member of the savanna vegetation on the central mesa. *Calamagrostis densa*, *Diplacus (Mimulus) clevelandii*, and *Monardella hypoleuca* ssp. *lanata* are members of CNPS List 4 and also occur along the E. boundary in Los Posas soil. *Thermopsis macrophylla* var. *semota* (CNPS List 1B) also is listed in the establishment record, although the location is not indicated.

**Engelmann Oak:** This species is an endemic to S. California, and the savanna subtype it forms in the central part of the area is considered an endangered plant association as a result of habitat alteration and destruction (Holland 1986). Engelmann oak is represented in four subtypes at Organ Valley, and it is reproducing well in all of them. Thus, the area has strategic importance as a reserve for this species.

### Physical Characteristics

The area covers about 560 acres (226 ha) on the S. slope of Black Mountain. Elevations range from 2300 to 3900 ft (701-1189 m). Slopes vary from 2 percent on the small mesa in the center of the area to 35 percent on the steep chamise-covered hillsides. The site is drained by two intermittent streams. Drainage is to the W. One spring occurs within the area and another just outside it.

Rocks are gabbroic (chiefly San Marcos and Cuyamaca gabbros) and granitic (primarily undivided quartz diorite of the Southern California Batholith). Soils include four mapping units, the most extensive of which is the Las Posas stony fine sandy loam 30-65 percent slopes, followed by acid igneous rock land, Reiff fine sandy loam 5-9 percent slope, and finally by Reiff fine sandy loam 0-2 percent slope. The last unit underlies the savanna in the center of the area. Average annual precipitation is estimated at 20-25 inches (508-635 mm). Mean minimum temperatures are about 44 °F (6.7 °C) and mean maximum is about 77 °F (25 °C).

### Association Types

No vegetation sampling was conducted in this survey.

**Chamise Chaparral (37200):** 206 acres (83 ha). This chaparral is dominated by *Adenostoma fasciculatum*. It is best developed on S.- and W.-facing slopes and ridges. *Yucca whipplei*, *Arctostaphylos glandulosa*, *Ceanothus leucodermis*, *Ceanothus foliosus*, *Eriogonum fasciculatum*, *Salvia apiana*, and *Quercus dumosa* are low-density associates.

On dry slopes with more N.-aspects, *Quercus dumosa* increases in relative cover. Also associated with this phase are *Garrya veatchii*, *Prunus ilicifolia*, *Rhus ovata*, and *Rhamnus ilicifolia*. This chamise-scrub oak vegetation covers 124 acres (50 ha), but it is classified as Mixed Chaparral in the establishment record.

On the E.- and S.-facing slopes overlying the acid igneous rock land soil series, a very dry phase of chamise chaparral occurs. About 20 percent of the cover is exposed granitic rock. Species composition is similar to the main phase of chamise chaparral, but the aspect is more xeric. All phases of chamise chaparral intergrade with both mixed chaparral and southern interior oak woodland.

**Southern Interior Oak Woodlands (71160, 71181, 71182, 81310, 42110, 32700):** 108 acres (44 ha). This formation is represented by three subtypes locally.

The first is the Engelmann oak savanna. This type dominates on the central mesa where Engelmann oak occurs in relatively low density, with an understory dominated by *Juncus* spp., *Stipa* spp., and *Muhlenbergia rigens* (fig. 130). Many small annuals occur including *Silene multinerva*, *Vicia exigua*, *Arabis glauca*, *Sidalcea malvaefolium*, *Medicago polymorpha*, *Erodium cicutarium*, and *Stellaria media*.

The second subtype is characterized by an understory dominated by *Salvia apiana*, *Eriogonum fasciculatum*, and other species characteristic of inland sage scrub including *Artemisia californica*, *Bromus mollis*, and *B. rubens*. Coast live oak (*Quercus agrifolia*) shares dominance with Engelmann oak in this type, which occurs on S.-facing slopes of about 8°.

The third subtype is a mixed-dominance closed-canopy oak woodland covering. Coast live oak and Engelmann oak share dominance. *Toxicodendron diversilobum* and *Heteromeles arbutifolia* are shrubby subdominants along with *Ceanothus leucodermis*, *Rhus ovata*, *Ribes indecorum*, and *Prunus ilicifolia*. This subtype occurs on relatively mesic, moderately sloping WSW.-facing slopes. This subtype may intergrade with chamise chaparral on W.-facing slopes where a sparse oak cover overlies an understory of *Adenostoma fasciculatum*, *Thalictrum polycarpum*, *Rhus ovata*, and *Heteromeles arbutifolia*.

Regeneration of Engelmann oak is excellent within all three main subtypes.

**Mixed Chaparral (37110, 37120):** 198 acres (80 ha). This type covers W.-facing slopes. The principal woody species include *Arctostaphylos glandulosa*, *A. glauca*, *Quercus dumosa*, *Ceanothus leucodermis*, *C. oliganthus*, *C. integerrimus*, *C. tomentosus*, *Erigeron fasciculatus*, *Heteromeles arbutifolia*, *Rhus ovata*, *Rhus laurina*, *Clematis lasiantha*, and *Nolina parryi*. Both Engelmann and coast live oaks occur sporadically. Understory associates include *Symphoricarpos mollis*, *Cheilanthes clevelandii*, *Pellaea mucronata*, *Haplopappus squarrosus*, *Eriophyllum confertiflorum*, *Eriodictyon angustifolium*, *Antirrhinum nuttallianum*, *Thalictrum polycarpum*, and *Toxicodendron diversilobum*.

**Riparian Oak Woodland (61310):** 48 acres (19 ha). This mesic association occurs along the two intermittent streams and scattered sandy washes. This woodland contains the following woody species: coast live oak, Engelmann oak (in low frequency), California sycamore (*Platanus racemosa*), *Salix lasiolepis*, and *Toxicodendron diversilobum*. A rich understory includes *Keckiella cordifolia*, *Dryopteris arguta*, *Woodwardia fimbriata*, *Iris missouriensis*, *Pycnanthemum californicum*, *Lonicera subspicata*, and *Anemopsis californica*.

### **Plant Diversity**

One hundred eighty-two taxa are listed.

### ***Conflicting Impacts***

Grazing occurred in Organ Valley until 1981. Cattle grazing in oak woodlands contributed to poor reproduction by Engelmann and coast live oaks. Fuel breaks have been used by off-road vehicles, and this has had negative impact on the sensitive plants of the N. boundary area. Three fires have occurred in portions of the area since 1913. The largest was the 1961 Black Mountain fire, which affected the N. portion of the area.

**Figure 130—Organ Valley,** Engelmann oak savannah in Organ Valley RNA. (around 1985)

