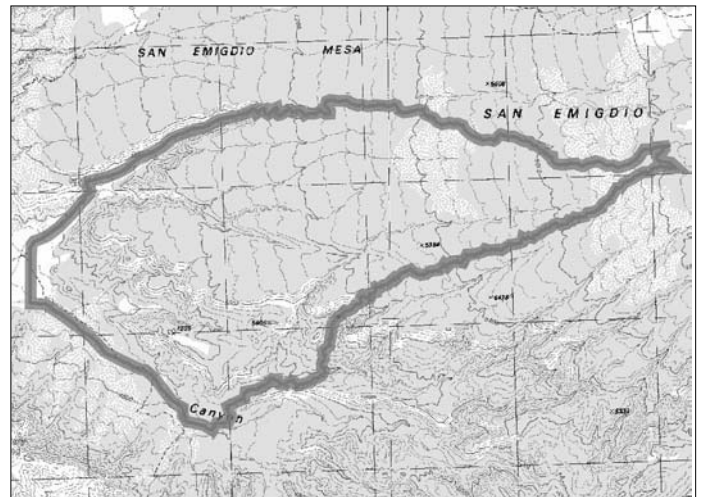


73. San Emigdio Mesa (Parikh 1993a, Phillips 1998e)

Location

This established RNA is located on Los Padres National Forest in Ventura County. It is approximately 83 miles (133 km) from Santa Barbara. The RNA lies within the Chumash Wilderness of the Mount Pinos Ranger District. Its boundaries include portions of sections 7, 8, 12, 13, and 18 of T8N, R22W (34°48'N., 119°15'W.), USGS Apache Canyon and Sawmill Mountain quads (fig. 147). Ecological subsection – Northern Transverse Ranges (M262Bb).



Target Element

Pinyon-Juniper Woodland

Distinctive Features

The pinyon-juniper woodland type is rare within the Region 5 RNA network. Dwarf oak (*Quercus turbinella* ssp. *californica*) occurs with the pinyon-juniper woodland throughout the RNA and can be considered a co-dominant species in many areas. Most of the vegetation of the RNA is located on a large alluvial fan in a transition zone between cismontane and desert communities in S. California. Some of the species occur outside their typical ranges.

In addition to the pinyon-juniper woodland, the RNA supports a variety of other habitats including cushion-plant lower montane flats, a mesa, rocky canyons, washes, creeks, alluvial terraces, and a wetland spring and meadow area.

Rare Plants: Lemmon's xerasid (*Syntrichopappus lemmonii*) (CNPS List 4) occurs in the RNA, 75 miles (121 km) outside its previously documented range. The California jewel flower (*Caulanthus californicus*) (CNPS List 1B) has been reported in nearby canyons but was not sighted in the RNA.

Rare Fauna: The RNA falls within the breeding region of the California condor (*Gymnogyps californianus*), a Federally- and State-listed endangered species.

Archeological: Open-air campsites and historic rock-art sites occur on the slopes below San Emigdio Mesa and at lower elevations in Apache Canyon and nearby washes.

Fire History: No major fires have been recorded since 1912. Risk of major damage due to fire is currently low because understory is sparse and fuel load is low in the stands.

Physical Characteristics

The area covers 1200 acres (486 ha) with an elevation of 4500-5800 ft (1372-1767 m). Most of the RNA in the E. part is composed of an alluvial fan dissected by many intermittent streams and gullies. The RNA is part of the Transverse Ranges in the South Coast Drainage Basin. It is bordered on the E. by the Mount Pinos region and on the W. by Cuyama Valley.

The RNA is bounded by faults on its N., S., and W. sides. It is composed of Mesozoic Era (Jurassic Period or older) granitic intrusive igneous and metamorphic rocks and Cenozoic Era nonmarine sedimentary rocks and alluvial deposits. The top of the mesa is made up of Quaternary Period surficial sediments (coarse fan gravel of granite and metamorphic rocks embedded in a

Figure 147—San Emigdio Mesa RNA

sandstone matrix). The area along the W. boundary is composed of folded rock (alluvial gravel, sand, and some clay) from the lower part of the Morales formation. Portions of the S. boundary area are composed of clays, sandstone, and conglomerates of the Quatal formation.



Figure 148—San Emigdio Mesa, pinyon-oak-juniper woodland with an understory of basin sagebrush (*Artemisia tridentata*) and annual species, dry wash leading to the top of San Emigdio Mesa. (1992)

Soils belong mainly to the Morical-Supan-Green Bluff families association (10-60 percent [6-31°] slope, 0-7 inches deep, dark brown to dark grayish brown gravelly or sandy loam). The remaining soils fall into the Los Robles-Trigo families-Orthents association (30-60 percent [17-31°] slope, 0-10 inches (0-25.4 cm) deep, light yellowish brown sandy to gravelly loam) and the Orthents-Fluvents complex (0-15 percent [0-9°] slope, 0-14 inches (0-5.5 cm) deep, pale brown to light yellowish brown coarse sandy loam).

Two nearby weather stations, Apache Camp and Chuchupate Ranger Station, have mean annual precipitation (1951-1960) of 8.7 inches (22.0 cm) and 11.1 inches (28.1 cm), respectively. Temperature data are not available. Nevertheless, for the pinyon-juniper woodland region, the mean summer maximum temperatures range from 88 to 95 °F (31-35 °C), and the mean winter minimum temperatures range from 20 to 30 °F (-7 to -1 °C), with 150-250 frost-free days per year.

Association Types

Pinyon-Oak-Juniper Woodland (72210/72220): The RNA is almost exclusively dominated by this association type (fig. 148), containing a homogeneous distribution of even-aged, open stands of low trees with shrubs in between. One-needle pinyon pine (*Pinus monophylla*) is the dominant tree species. Pinyon pines range from 6 to 65 ft (1.8-20 m), but most are 10 to 30 ft (3-9 m) tall. Dbh values vary from about 1 to 30 inches (3-76 cm), the average being about 7 inches (18 cm). Mean basal area is 0.43 ft²/acre (0.10 m²/ha). Density of adult pinyon pines is about 91 trees/acre (225 trees/ha), with the basal cover being 40 ft²/acre (9.3 m²/ha).

The major shrub species are dwarf (scrub) oak and California juniper (*Juniperus californica*). Dwarf oak is the dominant shrub at high elevations and on N. exposures. Juniper occurs more at lower elevations and on W. and S. exposures. Juniper heights range from 6 to 16 ft (1.8-5 m), and density is 17 trees/acre (42 trees/ha). Very few juniper saplings were counted, and no seedlings were found. In contrast, oaks had the highest number of saplings and seedlings.

Other major understory shrub species found on flat alluvial washes and terraces include *Artemisia tridentata*, *Chrysothamnus nauseosus* ssp. *hololeucus*, and *Haplopappus linearifolius*. The understory in most places also is dominated by perennials such as *Lupinus excubitus* var. *austromontanus*, *L. formosus*, *Eriogonum fasciculatum* ssp. *polifolium*, *E. wrightii* ssp. *subscaposum*, and *Penstemon centranthifolius*. At higher elevations at the top of the mesa, low cushion plants such as *Eriogonum kennedyi* and *Astragalus purshii* var. *tinctus* are found in gravelly or rocky soil.

Wetland Meadow (45100): This association type occurs in a small area at Cienega Spring in the NW. part of the RNA. It is composed of species from both wetter and drier wetland habitats. The dry-meadow wetland community is dominated by *Juncus* spp. and *Carex* spp. The wetter areas contain *Scirpus* spp., *Eleocharis* spp., *Mimulus guttatus*, *Veronica americana*, and *Ranunculus cymbalaria*.

Plant Diversity

One hundred six species of vascular plants are listed.

Conflicting Impacts

The entire RNA lies within the Apache Canyon grazing allotment, which is currently grazed between June 1 and October 31. Grazing is the only major disturbance in the W. section of the RNA; it is most intense in the Cienega Spring meadow area and at the base of the nearby washes. Wetlands are rare in the RNA, but they contain a unique assemblage of desert transitional and lower montane plant species. Grazing should be discontinued or severely restricted to protect and preserve this habitat.

Nettle Spring Campground (approximately 1 mile [1.5 km] W. of the RNA) is the only campground in the vicinity that is open to the public. Only light recreational activities associated with camping and some hunting and target practice go on immediately outside the RNA. Recreation within the RNA is limited largely to off-trail hiking and bird watching.