

74. San Joaquin Experimental Range (no ecological survey, Pacific Southwest Forest and Range Experiment Station 1971)

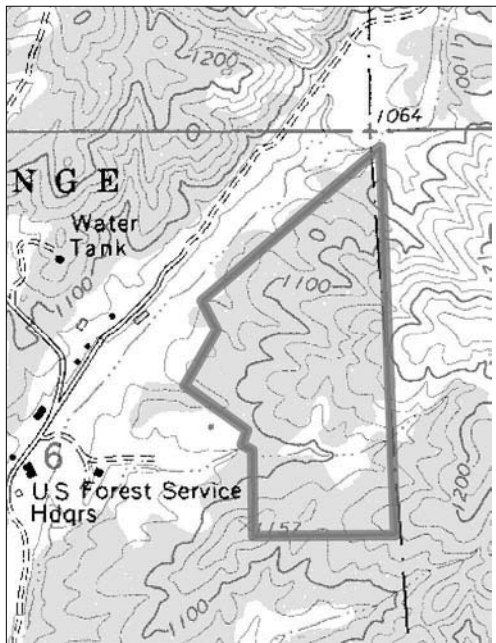


Figure 149—San Joaquin Experimental Range RNA

Location

This established RNA is on the San Joaquin Experimental Range, near the town of O'Neals, Madera County, approximately 28 miles (45 km) N. of Fresno. It is within the E1/2 of section 6 T10S, R21E MDM (37°06'N., 119°43'W.), USGS Millerton Lake West quad (fig. 149). Ecological subsection – Lower Granitic Foothills (M261Fc).

Target Element

Blue Oak-Foothill Pine (*Quercus douglasii*-*Pinus sabiniana*)

Distinctive Features

The blue oak-foothill pine woodland (71410) is representative of the vegetation type typical of most of the granitic foothills on the E. side of the San Joaquin Valley from Madera County southward. This RNA has been maintained as a research area since 1934 and has been associated with research studies on the Experimental Range since that date. From 1935 to 1965, 192 publications relating to research done on the Experimental Range were released. The Range scientists maintain a zoological collection as well as an herbarium.

Basic weather data have been collected since 1934. The RNA provides opportunities for studying the impact of livestock grazing and fire on annual plants. Permanent photo stations and vegetation sampling transects (installed in 1992) exist at the Range.

Physical Characteristics

The area covers 70 acres (28 ha). Its topography consists of rolling hills with gentle slopes. Elevations range from 1065 to 1200 ft (325-366 m). The soil is mostly Ahwahnee coarse sandy loam with small inclusions of Hanford coarse sandy loam and Visalia coarse sandy loam. Mean annual precipitation is 19 inches (4835 mm), and mean monthly temperatures vary between 41.9 and 80.4 °F (5.5-26.9 °C).

Association Types

Foothill Pine-Oak Woodland (71410) and Non-Native Grassland (42200): Vegetation cover of the RNA is open woodland (foothill pine, blue oak, and *Quercus wislizenii*) with shrub and annual plant understory (fig. 150). *Ceanothus cuneatus*, *Arctostaphylos mariposa*, *Bromus mollis*, *B. rigidus*, *Festuca megalura*, and *Erodium botrys* are among the more important nontree species. There is no map of vegetation cover.

Fire History

The last fire occurred in the area around 1929.

Grazing History

In the late 1800s, domestic livestock grazed the area heavily. The RNA has not been grazed since 1934.

Plant Diversity

Three hundred and nineteen species are identified for the whole San Joaquin Experimental Range. There is no specific plant list for the RNA.



**Figure 150—San Joaquin
Experimental Range, blue oak –
foothill pine woodland in San
Joaquin Experimental Range RNA.
(A. Dennis 1992)**