

95. Wilder Ridge (Rundel and Shultz 1992, Cheng 1996e)

Location

This established RNA is located on the E. edge of Corning Ranger District in Mendocino National Forest. It lies on the E. slope of the N. Coast Ranges in Tehama County and encompasses most of sec. 26 T23N, R7W MDBM (39°49'15"N., 122°37'30"W.), USGS Newville quad (fig. 189). Ecological subsection – Western Foothills (M261Ca).

Target Elements

Chamise (*Adenostoma fasciculatum*) Chaparral

Distinctive Features

Wilder Ridge, running N.-S. on the W. border of the RNA, is the dominant physical feature. It is on an outlying range E. of the main body of the Coast Range. The dominant botanical feature is chamise chaparral, which covers most of the RNA. Intermingled with small areas of foothill pine (*Pinus sabiniana*)-oak woodland and non-native grassland, the chamise chaparral is typical for areas N. of the Carquinez Strait in the inner Coast Range (fig. 190).

Rare Plants: Two CNPS List 1B plants occur in the RNA, *Eriastrum brandegeae* and *Antirrhinum subcordatum*. Both are found in the chamise chaparral vegetation type.

Rare Fauna: The presence of Peregrine falcon (*Falco peregrinus anatum*, Federally- and State-listed endangered species) in the RNA has been confirmed, and that of prairie falcon (*Falco mexicanus*, State-listed species of special concern) has been suggested strongly by surveys conducted by Forest Service employees.

Fire History: The last fire to occur in the RNA was in 1952. It apparently started on private land N. of the RNA. There are no records of other fire events within the RNA. This relatively rare fire occurrence may be a result of the unique geological stratum, topographical position, and vegetation mosaic of the RNA. Fires from human ignitions are unlikely to spread into the RNA except from the N. side. The ridgetop along the W. edge of the RNA is underlain by a stratum that presents an unstable surface of very low fertility. This provides a broad firebreak of rocks almost bare of vegetation. Along the E. boundary, vegetation is extremely sparse and appears to act more as a fuel break than as a source of ignitions. Vegetation along the S. boundary is continuous, a mosaic of chaparral, woodland, and savannah similar to the RNA. Fire could spread into the RNA from this side, but there are no roads or habitations for many miles. Such conditions also allow the RNA to have an experimental fire regime because: (1) there is low risk of fire escaping out of the RNA, (2) it is protected from human-caused fires originating outside the RNA, and (3) it has clear, logical lines for controlling burns from within.

Physical Characteristics

The total area in Wilder Ridge RNA is 570 acres (231 ha). From the valley bottom on the E. edge to the crest of Wilder Ridge on the W. of the RNA, the elevation range is about 854 ft (260 m). Several small ridges branch out from Wilder Ridge running toward the E. The slopes on the Wilder Ridge are extremely precipitous with some up to 80 percent (38°). The branching ridges

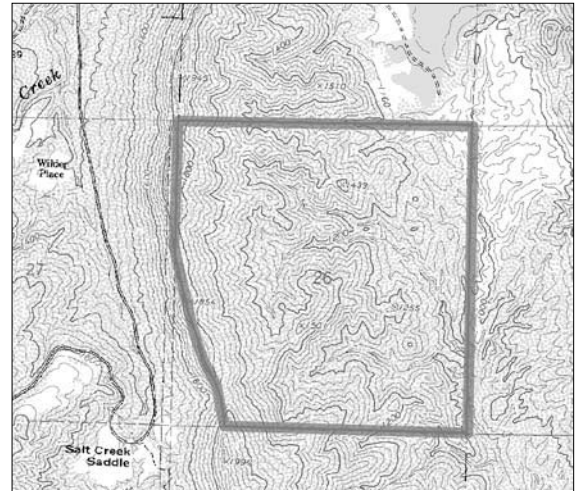


Figure 189—Wilder Ridge RNA

are gentle, with 5-15 percent (3-8°) slopes on top and 20-30 percent (11-17°) on slopes between ridgetops and the drainages. In the RNA, several knobs exist. Elevations of the knobs range from 1200 ft (366 m) to just over 1500 ft (457 m).

Several unnamed ephemeral drainages can be found in the RNA, flowing to the E. These drainages meet Salt Creek and then flow SE. No perennial surface flow of water is present, but a subsurface flow is present throughout the year. Soils in the RNA are generally shallow to very shallow and highly eroded.

The climate is Mediterranean with wet, cool winters and warm, dry summers. More than 90 percent of the precipitation is concentrated between October and April. The nearest weather station is the Paskenta Ranger Station, from which complete precipitation data are available. Average annual precipitation is approximately 24 inches (61 cm). Other stations in the area with complete climatological data are Covelo and Orland, which represent the climatic extremes of Wilder Ridge RNA. Climate in the RNA is in the middle of a gradient from coastal on the W. (Covelo, 55.3 °F [12.9 °C] average annual temperature) to inland (Sacramento Valley) on the E. (Orland, 61.4 °F [16.3 °C] average annual temperature).

Association Types

Pure chamise covers the upper third of the slope and all but the N. aspects of draws. The N.-facing slopes contain a mixed shrub type of manzanita (*Arctostaphylos* spp.), toyon (*Heteromeles arbutifolia*), California bay (*Umbellularia californica*), scrub oak (*Quercus dumosa*), and some interior live oak (*Quercus wislizenii*). The middle third of the area is predominantly chamise with small groups of young foothill pine and scattered, older foothill pine jutting through the shrubs. There are some small openings of annual grass occurring in this zone, with several varieties of small herbaceous and woody plants on the N. aspects. The E. edge of the area is grassland or savannah type; ground cover is predominantly annual grasses with sparse blue oak (*Quercus douglasii*) overstory.

Chamise Chaparral (37200): This is the major vegetation type in the RNA, covering approximately 340 acres (138 ha). *Adenostoma fasciculatum* is the dominant species. It occupies higher elevations of the W. third of the RNA, with nearly 100 percent cover and a height of 5.0 to 6.6 ft (1.5-2.0 m). In the center portion of the RNA, chamise chaparral is more open than that of the W. third of the RNA and interspersed with foothill pine and manzanita (fig. 190). In the E. third of the RNA, the chaparral is open with highly diversified annual and perennial herbaceous species. On steeply plunging slopes within this vegetation type, open woody populations of *Eriodictyon californicum*, *Ceanothus cuneatus*, *Eriogonum nudum*, and *Eriophyllum confertifolium* are often found. Understories are herbaceous species including *Avena barbata*, *Linanthus ciliatus*, and *Sanicula bipinnata*. Small areas of woodland associated with ephemeral riparian systems and subsurface flows also are included in this vegetation type. Interior live oak, cottonwood (*Populus fremontii*), willows (*Salix* spp.), toyon, California buckeye (*Aesculus californica*), mountain mahogany (*Cercocarpus betuloides*), western redbud (*Cercis occidentalis*), foothill pine, and poison oak (*Toxicodendron diversilobum*) are notable in these areas.

Foothill Pine-Oak Woodland (71410): Foothill pine and blue oak are the characteristic species of this vegetation type. Other species include *Ceanothus cuneatus*, *Haplopappus linearifolius*, *Elymus caput-medusae*, *Gilia tenerrima*, *Bromus rubens*, and *Bromus mollis*. Distribution of this woodland is fragmental, due to soil conditions. Soils here are shallow lithosols, classified as Millsholm clay loam, which support the chaparral community. However, in places where tree roots can penetrate (soils are deep or fracture planes occur in the parent material),

the woodland community replaces the chaparral. The woodlands occur on a range of slopes and exposures but are most apparent on gently sloping, broad ridgelines, along drainage bottoms, and on N.-facing slopes.

Non-Native Grassland (42200): This vegetation type occurs on the E. margin of the RNA. It is the area where cattle grazing is concentrated and where human use may have occurred. Along with introduced annual grasses such as *Aira caryophylla*, *Avena barbata*, *Bromus rubens*, *Bromus mollis*, and *Festuca dertonensis*, there are also native grasses and forbs such as *Plantago hookeriana*, *Salvia columbariae*, *Melica californica*, and *Poa scabrella*. Rarely, on the ephemeral stream bank, small patches of deergrass (*Muhlenbergia rigens*) can be found. On the shallow soil in the NE. corner of sec. 26, *Eriogonum wrightii* ssp. *membranaceum* (undetermined, Isle personal communication 1996) grows.

Plant Diversity

At least ninety-five vascular plant species occur in the RNA.

Conflicting impacts

There is one grazing allotment in the RNA. Most of the grazing takes place in the main valley along the E. edge of the RNA, in the open savannah with moderate slopes. Cattle trails also are found in open chaparral, but the impacts of trampling and chiseling are limited to those routes only. The primary impact of grazing on the vegetation of Wilder Ridge RNA may have been the replacement of native grasses with introduced annuals. This is typical of much of California grasslands, and current grazing levels are not thought to alter this condition.

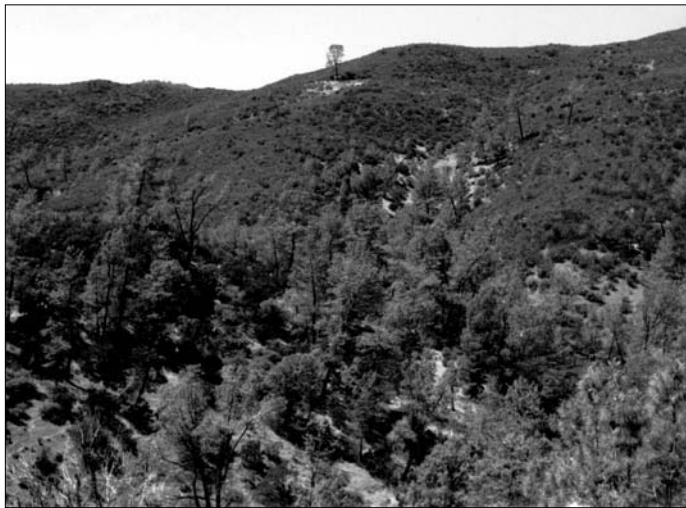


Figure 190—Wilder Ridge, dominant matrix of chamise chaparral with local populations of foothill pine in Wilder Ridge RNA. (around 1991)