

62. North Trinity Mountain (Sawyer 1981b)

Location

This recommended RNA is on the Six Rivers National Forest. It lies about 11 miles (18 km) NE. of the town of Hoopa, Humboldt County, in sects. 3, 4, and 5 T8N, R6E and sects. 32 and 33 T9N, R6E HBBM (41°7'N., 123°30'W.), USGS Tish Tang Point and Trinity Mtn. quads (fig. 126). Ecological subsection – North Trinity Mountain (M261Aq).

Target Element

White Fir (*Abies concolor*)

Distinctive Features

White Fir Forest: This type of forest is the major cover over large portions of the upper elevation Klamath Mountains ecological section. Although it occurs in several other candidate and established RNAs of the Klamath region (e.g., Bridge Creek, Haypress Meadows, Manzanita Creek, Peach Creek, Sugar Creek), it is not particularly well represented at those sites. The varied slope exposure and the broad elevational range within this area enable a wide representation of this important vegetation type, including some overlap with lower-elevation forests dominated by Douglas-fir (*Pseudotsuga menziesii*) and upper-elevation forests dominated by noble fir (*Abies procera*) forest.

Noble Fir Forest: Although not specifically discussed in the ecological survey, the North Trinity Mountain area has been singled out as having one of the best stands of this species in California (Sawyer and Thornburgh 1969). The area also should be known and studied for this value.

Rare Flora: One species, *Gentiana setigera*, is on List 3 of CNPS. It occurs locally in the meadows of Red Cap Hole.

Research Precedent: Because this montane forest is the most accessible to Humboldt State University, the University has already used the area for research and educational purposes.

Physical Characteristics

The study area includes about 640 acres (259 ha) of slopes drained by the South Fork of Mill Creek (study area shown is larger). Slopes range from gentle to steep and include N., W., and S. exposures. Terraces are minor, especially at lower elevations. Slopes in the lower W. portion are most abrupt. Elevations range from 4500 to 6362 ft (1372-1939 m).

The area is underlain by quartz diorite of the Ironside Mountain Batholith. Glacial action created Mill Creek Lakes, and the slopes behind the lake are scoured. Morainal deposits are common. Soils are likely to be of the Chawanakee (sand loams drying by midsummer) and Chiquito (shallow, on upper slopes and ridges) series, but they also include large areas of rock outcrop and coarse loamy mixed soils typical of glacial till. Snow typically lingers until July on high N. slopes. Mean annual temperatures are estimated at somewhat lower than 50 °F (10 °C), with average annual precipitation about 70 inches (1778 mm).

Association Types

Twenty-one relevés and ten 0.1-acre strips were sampled in the white fir forest. Areal cover is not given for the associations.

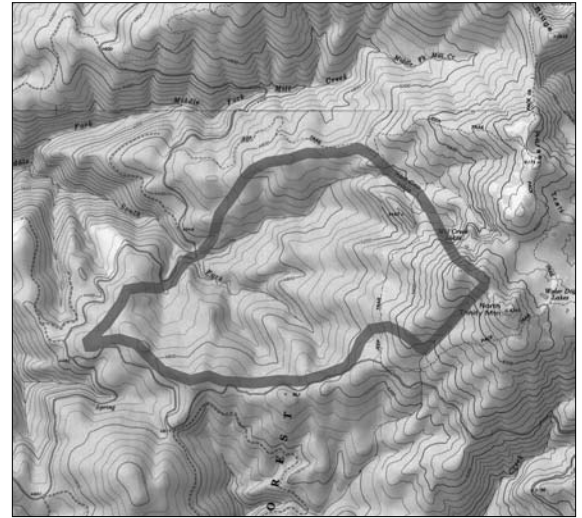


Figure 126—North Trinity Mountain rRNA

White Fir Forest (84240): The majority of the area is classified as a part of this forest type, which is divided locally into two series. Evaluation of the samples results in the classification of the white fir forest into the white fir/*Pteridium aquilinum* and the white fir/*Quercus sadleriana* subtypes.

Sampling was conducted primarily on the mid-slopes of the area. The canopy is dominated by white fir (89 percent of the 403 trees/ha). Basal area for the forest is 118 m²/ha, of which white fir makes up 73 percent. There are a few large sugar pines (*Pinus lambertiana*) that make up a moderate portion of the basal area, but the two most important subdominants are incense-cedar (*Libocedrus decurrens*) (basal area 15 m²/ha) and noble fir (12 m²/ha). Trees older than 100 years reach heights of about 120 ft (37 m).

The first subtype is an extensive closed forest with canopy and understory dominated by white fir (fig. 127). The shrub layer is not well developed, although 12 species are noted, with *Acer glabrum*, *Rubus parviflorus*, and *Symphoricarpos hesperius* most common. Some 25 herb taxa are restricted to this type, and 8 more are most common here. *Linnaea borealis* is common and suggests the mesic affinities of this forest type. Other important species include *Anemone deltoidea*, *Achlys triphylla*, *Chimaphila umbellata*, *Vancouveria hexandra*, *Rubus vitiifolius*, and *Clintonia uniflora*.

The second subtype, white fir/*Quercus sadleriana*, also is dominated by white fir in both canopy and understory (reproduction), but Douglas-fir is also an important component. This type is more extensive on steeper slopes at lower elevations than the first subtype. *Quercus sadleriana* dominates the shrub layer,

with few herbs in the ground layer. Nine shrubs and 20 herbs are listed for the subtype. However, none of these species except *Q. sadleriana* accounts for more than 25 percent cover. The most conspicuous herb is *Chimaphila umbellata*.

Montane Chaparral (37510): This type is termed white fir/*Quercus vaccinifolia* and is dominated by *Arctostaphylos patula* and *Quercus garryana* var. *breweri*. White fir and incense-cedar are frequent along with the shrubby sclerophylls. Only one herb is noted in the sample of this type, and it (*Apocynum androsaemifolium*) has very low cover.

Noble Fir Forest (85310): This forest type is not discussed in depth, but it does occur at the upper elevations near the top of North Trinity Mountain. It is probably similar in structure and density to other noble fir forests of the W. Klamath Mountains ecological section (see Haypress Meadows cRNA and Rock Creek Butte cRNA).

Meadows (45100): Although not specifically discussed, many of the taxa in the species list are typical meadow species; a photograph of a small meadow with such species as *Veratrum californicum* is included in the survey.

Plant Diversity

Two hundred twenty-one taxa are listed.

Conflicting Impacts

Some logging has taken place in the past along the W. boundary. Some trespassing cattle have grazed in the small meadows of Red Cap Hole. Some off-road-vehicle use is reported on the access trail (an old jeep road) to Mill Creek Lakes.

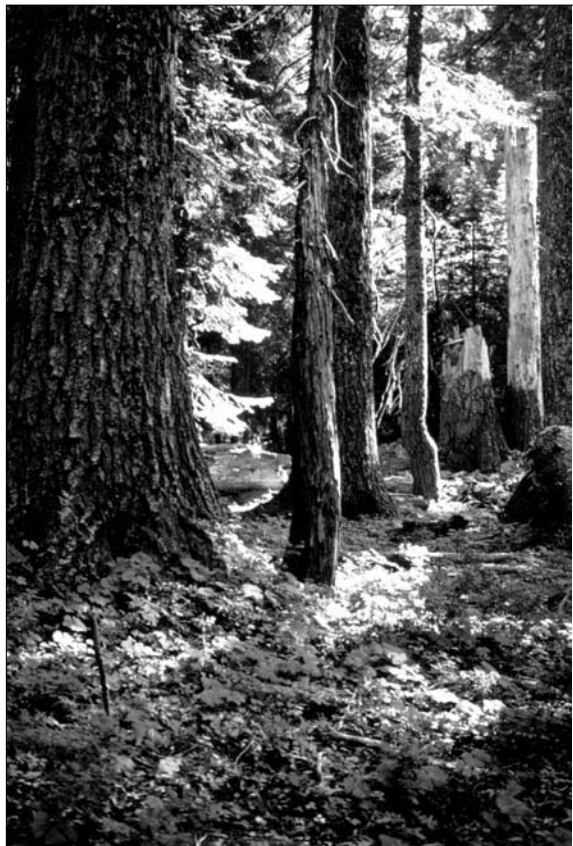


Figure 127—North Trinity Mountain, general structure of the white fir/*Pteridium aquilinum* type in North Trinity Mountain rRNA. (1981)