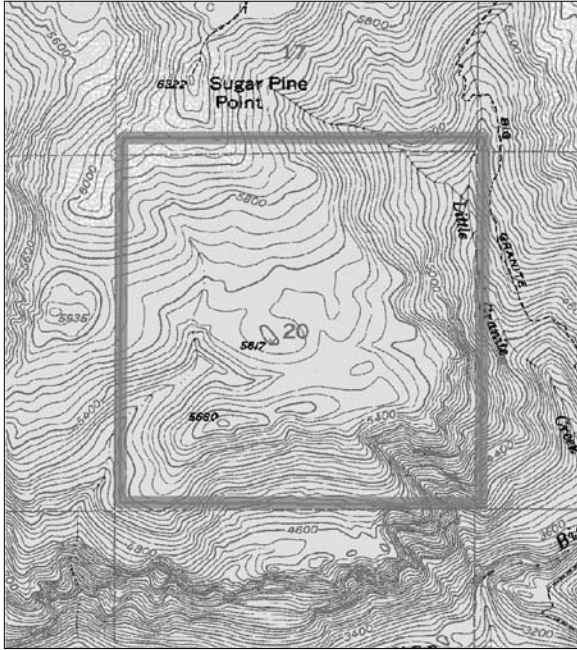


87. Sugar Pine Point (Berg 1991b, Palmer 1981)



**Figure 173—
Sugar Pine Point
RNA**

Location

This established RNA is located on the Tahoe National Forest about 4 miles (6 km) S. of Cisco Grove. The area encompasses sect. 20 T16N, R13E MDBM (39°15'N., 120°32'W.), USGS Duncan Peak quad (fig. 173). Ecological subsection – Upper Batholith and Volcanic Flows (M261Eh).

Target Element

Mixed Conifer Forest

Distinctive Features

Succession: This study site provides numerous examples of the dynamics of mixed conifer forest succession from montane chaparral through mature stands codominated by several species.

Rare Plants: Although not specifically listed from the study site, several rare plants were mapped in the vicinity of the site and may occur here. These include *Cypripedium fasciculatum* (CNPS List 4) and three members of CNPS List 1B: *Lewisia pygmaea* ssp. *longipetala*, *Lewisia serrata*, and *Phacelia stebbinsii*.

Physical Characteristics

The area covers 640 acres (259 ha) of a S.-facing canyon slope above the North Fork of the American River. Elevations range from 4000 ft to about 6100 ft (1219–1859 m). The area consists of a bowl-like slope with promontories extending southward on the E. and W. edges of the area. Small drainages and rolling topography exist in the middle of this bowl. Slopes are generally moderate within the bowl, but they drop steeply at the lower (S.) edge of the area toward the riverbed.

The area is underlain by Paleozoic and Jurassic marine sediments and metasediments. There are minor exposures of granitic rock (Sierra Nevada Batholith) in the area. Soil development is poor except on the more level portions of the bowl, which also support the largest trees. Precipitation at Lake Spaulding (7.5 miles, 12.1 km N.) averages 65.8 inches (1673 mm) per year. Temperature averages are 34 °F (1.1 °C) for January and 63 °F (17.3 °C) for July, with annual average of 48 °F (8.7 °C).

Association Types

Based on 14 releves and subsequent construction of an association table, four associations were recognized. Five releves also double as sample plots where density and basal area cover for trees were recorded.

Ponderosa Pine (*Pinus ponderosa*)-Sugar Pine (*P. lambertiana*)-White Fir (*Abies concolor*) (84230, 84240): 250 acres (101 ha). Eight releves are located on this association, which is dominated by the three namesake species or incense-cedar (*Libocedrus decurrens*), or by all four. There is a wide variation in size-class distribution and dominance, ranging from dense stands of young white fir to mature forest codominated by large sugar and ponderosa pines and white fir (fig. 174). Total basal area cover ranges from 9.7 to 110 m²/ha and tree density from 308 to 764/ha. Douglas-fir (*Pseudotsuga menziesii*) is occasional. Red fir (*Abies magnifica*) and Jeffrey pine (*Pinus jeffreyi*) also occur at the upper elevations.

As a result of fire, young forest has senescent shrubs of *Quercus vaccinifolia* and *Arctostaphylos patula*, indicating past dominance by these mountain chaparral species. Shrubs vary in density and composition depending on the history of the individual plot. *Arctostaphylos patula*, *Quercus vaccinifolia*, *Ceanothus fresnensis*, and *C. integerrimus* are among the most common shrubs. Herbs also vary with plot history. Among the most prevalent are *Gayophytum humile*, *Apocynum androsaemifolium*, *Pteridium aquilinum* var. *pubescens*, *Chimaphila menziesii*, and *Penstemon deustus*.

Montane Chaparral (37510): 219 acres (89 ha). The largest portion of this association is on the steepest part of the central bowl area. This montane chaparral is maintained by fire, which carries well up the steep slopes. Typical species are the same as those shrubs listed for the ponderosa pine-sugar pine-white fir association.

California Black Oak (*Quercus kelloggii*) Forest (71120, 81340): 94 acres (38 ha). California black oak is an important species of the lower elevation forests. Many California black oaks are resprouts from previous fires. Some root crowns are 3-5 ft (1-1.5 m) in diameter. One sample stand is representative of this type and has a number of young ponderosa pine, sugar pine, incense-cedar, and white fir in it. California black oak comprises 67 percent of the basal area and 50 percent of the stems. Average stem diameter of California black oak in this stand is 6.7 inches (17 cm).

Rocky Herbaceous Association (no Holland equivalent): In open, rocky sites the montane chaparral gives way to this type, dominated by scattered herbs and grasses. These include *Poa palustris*, *Arabis holboellii*, *Penstemon deustus*, *Zauschneria californica*, *Onychium densum*, *Zigadenus venosus*, *Pteris* sp., and *Sitanion hystrix*.

Riparian (63500): Along the streambed of Little Granite Creek, a weakly developed riparian association occurs with such species as *Acer glabrum* var. *torreyi*, *Spiraea densiflora*, *Lonicera conjugialis*, *Lilium parvum*, *Senecio triangularis*, and *Navarretia propinqua*.

Plant Diversity

One hundred nine taxa are listed.

Conflicting impacts

None are mentioned. However, the area is surrounded by private land, necessitating unnatural boundaries to the RNA.

Figure 174—Sugar Pine Point, Mature
Pinus ponderosa stand with a dense understory of *Abies concolor* and *Libocedrus decurrens* in Sugar Pine Point RNA. (1989)

