

## 97. William's Point (Sawyer and Stillman 1977b)

### Location

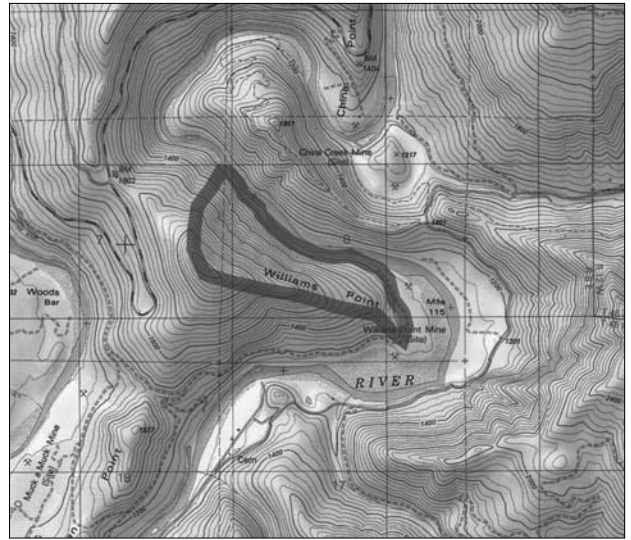
This study area (dropped from RNA consideration) is on the Klamath National Forest about 3 miles (5 km) E. of Happy Camp along the W. side of the Klamath River Canyon. It lies within portions of sections 7 and 8 T16N, R8E HBM (41°48'N., 123°19'W.), USGS Slater Butte quad (fig. 193). Ecological subsection – Western Jurassic (M261Aa).

### Target Elements

Pacific Douglas-Fir (*Pseudotsuga menziesii*) and Mixed Evergreen Forest

### Distinctive Features

This area is representative of inner Klamath River stands of Douglas-fir and tanoak (*Lithocarpus densiflorus*) on N.- and E.-facing slopes. The area is clearly a warmer coastal site than the Specimen Creek survey area, as indicated by the presence of tanoak, but is also somewhat drier than that area, as indicated by the lack of giant chinquapin (*Chrysolepis chrysophylla*).



**Figure 193—**  
**William's Point eco-**  
**logical survey area**

### Physical Characteristics

The area occupies 150 acres (61 ha). It includes N.- and E.-facing slopes of a promontory surrounded on three sides by the Klamath River. The fourth side is State Highway 96. Most slopes are steep (60-90 percent [31-42°]). Those at the E. end are moderate (30-50 percent [11-27°]). Elevations range from 1100 ft (335 m) at the edge of the Klamath River to 2250 ft (686 m) atop William's Point. The area is composed of pre-Silurian metasedimentary rock. Most soils are moderately developed except for the unstable thin, rocky soils of the central portion. Rainfall averages 46.7 inches (1186 mm) at Happy Camp. There are occasional winter snows and summer thundershowers. At Happy Camp the mean winter temperature is 42.2 °F (24.4 °C), and mean summer temperature is 76.3 °F (24.6 °C).

### Association Types

Forty relevés were sampled as well as forty points (point-centered quarter method). Sizes of associations are not given.

**Douglas-Fir (*Pseudotsuga menziesii*)/*Achlys triphylla* (81100, 82420):** This is the major forest type in the area. The relevés are analyzed with an association table, which divides the type into two phases: a lower slope, relatively mesic Douglas-fir/*Polystichum* phase and a relatively xeric upper slope Douglas-fir/*Ligusticum* phase.

1. The Douglas-fir/*Polystichum* phase is characterized by a dense lower canopy dominated by tanoak (100 percent presence, 440 trees/ha, basal area 20 m<sup>2</sup>/ha). Pacific yew (*Taxus brevifolia*) is restricted to this phase (27 percent presence, 27 trees/ha, 0.6 m<sup>2</sup>/ha). Pacific madrone (*Arbutus menziesii*) is the other major hardwood (73 trees/ha, 4.6 m<sup>2</sup>/ha). Douglas-fir is the major canopy dominant (100 percent presence, 257 trees/ha, 155.8 m<sup>2</sup>/ha). Productivity for Douglas-fir (measured from the outer 5 inches [13 cm] of trunk cored) in the Douglas-fir/*Polystichum* phase is similar to that in the Douglas-fir/*Ligusticum* phase (7.7 years/cm vs. 7.0 years/cm, respectively), while basal area is substantially higher.

Important shrubs of this phase include *Berberis nervosa*, *Corylus cornuta*, *Symphoricarpos mollis*, *Rosa gymnocarpa*, *Toxicodendron diversilobum*, and *Holodiscus discolor*. Many herbs are common to both phases. Some of the most important include *Polystichum munitum*, *Achlys triphylla*, *Trientalis latifolia*, *Disporum hookeri*, *Pteridium aquilinum*, *Galium triflorum*, and *Lonicera hispidula*.

2. The Douglas-fir/*Ligusticum californicum* phase is dominated by Douglas-fir (198 trees/ha, 63 m<sup>2</sup>/ha) but with a higher cover of sugar pine (*Pinus lambertiana*) (6 trees/ha and 4.8 m<sup>2</sup>/ha) than in the previous phase. Tanoak is greatly reduced in the subcanopy compared to the previous phase (7 trees/ha, 0.1 m<sup>2</sup>/ha). Bigleaf maple (*Acer macrophyllum*) becomes relatively important in the lower canopy (80 percent presence, 83 trees/ha, 4.0 m<sup>2</sup>/ha), and Pacific madrone values remain similar to those of the previous phase (38 trees/ha, 5.0 m<sup>2</sup>/ha).

This phase has a more distinctive herb stratum with *Madia madioides*, *Ligusticum californicum*, and *Lathyrus polyphyllus* restricted to it, along with such common shared species as *Pteridium aquilinum*, *Disporum hookeri*, *Galium triflorum*, *Trientalis latifolia*, and *Arnica* sp. Shrubs are similar to those in the previous phase with the notable absence of *Berberis nervosa*.

**Canyon Live Oak-Oregon White Oak/*Pityrogramma triangularis* (71110, 81320):** This association occurs on dry, steep unstable slopes. Ten points were sampled in this type. It is characterized by an open woodland dominated by small canyon live oak (134 trees/ha, 5.5 m<sup>2</sup>/ha) and Oregon white oak (166 trees/ha, 2.4 m<sup>2</sup>/ha). Total basal area of this type averages 7.8 m<sup>2</sup>/ha, and total density is 316 trees/ha. The herb layer is distinct with xerophytic species such as *Pityrogramma triangularis*, *Heuchera micrantha*, *Selaginella wallacei*, *Aira praecox*, *Polypodium californicum*, and *Eriogonum umbellatum* predominating. The major shrub is *Toxicodendron diversilobum* with lesser species including *Holodiscus discolor*, *Ceanothus integerrimus*, *Lonicera ciliosa*, *Cercocarpus betuloides*, and *Philadelphus lewisii* ssp. *gordonianus*.

### **Plant Diversity**

One hundred eleven taxa are listed.

### **Conflicting impacts**

The area is small and does not represent a variety of slope aspects. This restricts research potential. A clear-cut block prevents enlargement of the area to the N. The area was partially burned in a 1987 fire.