

WESTERN HEMLOCK-PACIFIC SILVER FIR

Tsuga heterophylla-Abies amabilis

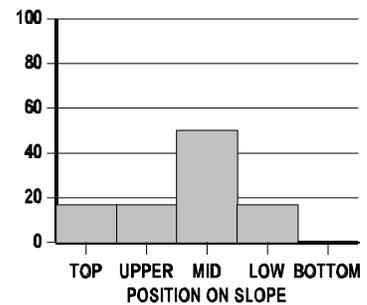
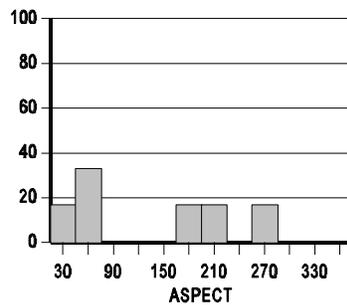
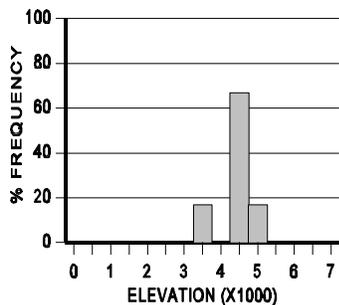
TSHE-ABAM (N=6; FS=6)



Distribution. This Association occurs on the Umpqua National Forest, primarily on the Diamond Lake Ranger District, but also on the Cottage Grove and North Umpqua Ranger Districts.

Distinguishing Characteristics. This Association is present at the highest elevations of the Series, on cool, moist sites. It is bounded at higher elevations by the Pacific Silver Fir Series and at lower elevations by other Western Hemlock Associations.

Soils. Parent material is most commonly basalt, andesite, or pumice mixed with ash. Based on five plots sampled, soils are deep and somewhat excessively well drained. Surface textures are loams and loamy sands with 10 to 80 percent rock fragments and 1 to 17 percent clay. Subsurface textures are loams and sandy loams with 20 to 90 percent rock fragments. The soil moisture regime is probably udic and the soil temperature regime is probably frigid. Soils classify into the following subgroups:



Dystrochrepts and Typic Udorthents.

Environment. This Association occurs at high elevations, averaging 3930 feet, and on variable aspects. Slope averages 32 percent and ranges between 3 and 77 percent. This Association is commonly found on middle-third slope positions.

Vegetation Composition and Structure. Total species richness for the Series is low compared with other plant associations in the Series, averaging 24. The overstory tree layer is dominated by Douglas-fir and western hemlock, with a significant component of Pacific silver fir in both the overstory and understory. Thin-leaved huckleberry is a frequent component of the shrub layer. Shrubs are generally not dominant, compared with other western hemlock associations. Vanillaleaf, common prince's-pine, western twinflower, one-sided pyrola, and coolwort foamflower are frequent in the herb/grass layer. Moss cover averages 9 percent.

Upper layer tree cover is relatively high for the Series, averaging 73 percent. Mid-layer tree cover averages 39 percent, and lower layer tree cover averages 24 percent. High shrub cover is very low (1 percent), but low shrub cover averages close to 10 percent. The herbaceous layer is quite variable, ranging from 2 to 85 percent cover, and averaging 30 percent.

Common name	Code	Constancy	Cover	Avg. Richness
<u>Overstory trees</u>				4
Douglas-fir	PSME	100	28	
Western hemlock	TSHE	100	24	
Pacific silver fir	ABAM	100	12	
White fir	ABCO	40	5	
<u>Understory trees</u>				3
Western hemlock	TSHE	100	33	
Pacific silver fir	ABAM	100	28	
Douglas-fir	PSME	40	1	
Pacific yew	TABR2	40	1	
<u>Shrubs</u>				6
Thin-leaved huckleberry	VAME	80	5	
Dwarf bramble	RULA2	80	4	
Dwarf Oregongrape	BENE2	60	1	
<u>Herbs</u>				14
Coolwort foamflower	TITRU	100	4	
Vanillaleaf	ACTR	100	3	
Common prince's-pine	CHUM	80	3	
Western twinflower	LIBOL	80	2	
One-sided pyrola	PYSE	80	1	
Starry false Solomon's-seal	SMST	60	2	
White trillium	TROV2	60	1	
Rattlesnake-plantain	GOOB2	60	1	