

WESTERN HEMLOCK-WESTERN REDCEDAR/PACIFIC RHODODENDRON

Tsuga heterophylla-Thuja plicata/Rhododendron macrophyllum

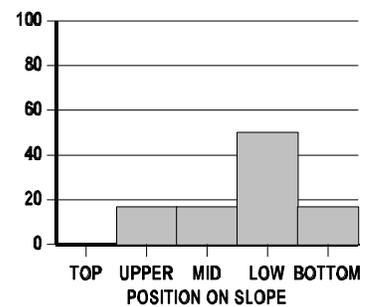
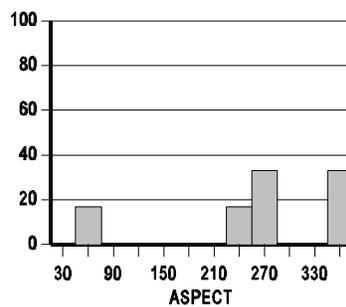
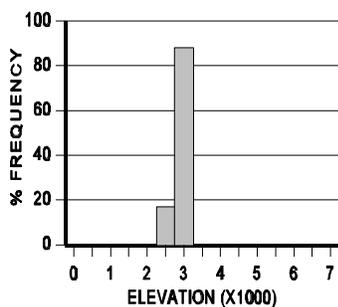
TSHE-THPL/RHMA3 (N=6; FS=6)



Distribution. This Association occurs on the Cottage Grove, North Umpqua, and Diamond Lake Ranger Districts, Umpqua National Forest. It is likely to occur on the Swiftwater Resource Area, Roseburg District, Bureau of Land Management.

Distinguishing Characteristics. This Association occurs at moderate elevations in the Cascade Mountains. It occurs in moist environments, although not quite as moist as the Western Hemlock/Salal/Western Sword-fern-SWO Association. Western redcedar is an important component, and Pacific yew, a humid site indicator, is present.

Soils. Parent material is highly variable and may include gabbro, tephra, rhyolite, pumice, andesite, sandstone, and breccia. Based on five plots sampled, soils are moderately deep to deep and well drained. Surface textures are loams and loamy sands with 45 to 80 percent rock fragments and 10 to 20 percent clay. Subsurface



textures are sandy loams, clay loams, and clays, with 30 to 85 percent rock fragments. The soil moisture regime is probably udic and the soil temperature regime is probably mesic. The soils classify into the following subgroups: Typic Dystrochrepts and Mollic Hapludalfs.

Environment. This Association averages 3110 feet in elevation and aspects are north and west. Slope averages 31 percent, and ranges between 14 and 60 percent. This Association occurs predominantly on lower slopes.

Vegetation Composition and Structure. Total species richness is intermediate for the Series, averaging 28. The overstory is dominated by Douglas-fir, and western hemlock and western redcedar are also frequent. The understory may have abundant western redcedar. Pacific yew and golden chinquapin are frequent, however, the covers are low. Hardwoods are not a significant component of the stand. Vine maple and golden chinquapin are present, but average only 2 and 3 percent cover, respectively. The shrub layer is dominated by Pacific rhododendron. Salal and dwarf Oregongrape are frequent and may also be abundant. Red huckleberry is also frequent, but at low cover. Western twinflower and whitevein pyrola are frequent in the herb/grass layer. Western sword-fern is frequent, but at very low cover. Moss cover is intermediate for the Series, and averages 23 percent.

Upper layer tree cover is high for the Series, averaging 73 percent. Middle and lower layer tree covers average 57 and 40 percent, respectively. Shrub cover is dominant in this association. High shrubs average 44 percent cover, the highest in the Series, and low shrubs average 60 percent cover. Total herb/grass cover is intermediate for the Series, averaging 23 percent, and ranges from 5 to 55 percent.

Common name	Code	Constancy	Cover	Avg. Richness
<u>Overstory trees</u>				4
Douglas-fir	PSME	100	56	
Western hemlock	TSHE	100	11	
Western redcedar	THPL	100	3	
<u>Understory trees</u>				6
Western hemlock	TSHE	100	35	
Western redcedar	THPL	100	22	
Golden chinquapin	CACH6	100	3	
Pacific yew	TABR2	100	3	
Douglas-fir	PSME	83	2	
<u>Shrubs</u>				9
Pacific rhododendron	RHMA3	100	42	
Salal	GASH	100	32	
Dwarf Oregongrape	BENE2	100	24	
Red huckleberry	VAPA	100	6	
Vine maple	ACCI	100	2	
Pacific blackberry	RUUR	83	2	
<u>Herbs</u>				13
Western twinflower	LIBOL	100	11	
Whitevein pyrola	PYPI2	100	1	
Western sword-fern	POMU	83	2	
Common prince's-pine	CHUM	83	2	