

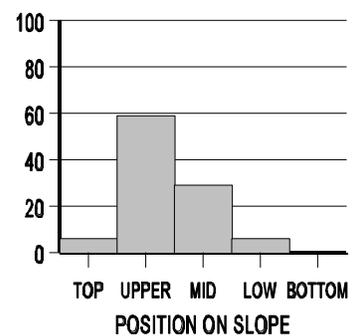
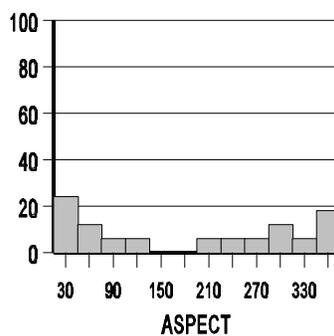
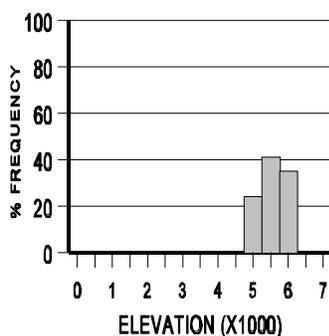
MOUNTAIN HEMLOCK-SHASTA RED FIR/DWARF BRAMBLE/ONE-SIDED PYROLA
Tsuga mertensiana-Abies magnifica shastensis/Rubus lasiococcus/Pyrola secunda
 TSME-ABMAS/RULA2/PYSE (N=17; FS=13, BLM=4)



Distribution. In the Cascades, Mountain Hemlock-Shasta Red Fir/Dwarf Bramble/One-sided Pyrola is found on the Butte Falls and Prospect Ranger Districts, Rogue River National Forest, and the Tiller, Diamond Lake, and North Umpqua Ranger Districts, Umpqua National Forest. In the Siskiyou, it is found on the Applegate Ranger District, Rogue River National Forest, the Illinois Valley Ranger District, Siskiyou National Forest, and the Grants Pass Resource Area, Medford District, Bureau of Land Management.

Distinguishing Characteristics. Mountain Hemlock-Shasta Red Fir/Dwarf Bramble/One-sided Pyrola is found at moderate temperatures and precipitation relative to the other plant associations in the Series. The frequent occurrence of dwarf bramble and the occasional occurrence of white fir indicate the warmer conditions.

Soils. Parent material is mostly pumice, andesite and basalt, with some dacite, ash, and mixed metamorphic materials. Soils are mostly moderately deep and deep, with



an average depth of 40 inches. Average surface rock cover is 6 percent, with 6 percent gravel. Based on three plots sampled, surface textures are loam, silt loam, or sandy loam, with 0 to 25 percent gravel and cobbles. Subsurface textures are loam, sand, or loamy sand with 20 to 25 percent gravel and cobbles and up to 40 percent stones.

Environment. Elevation averages 5780 feet. Mountain Hemlock-Shasta Red Fir/Dwarf Bramble/One-sided Pyrola occurs on most aspects, although rarely on south aspects. Slope averages 27 percent and ranges from 5 to 55 percent. Upper and middle one-third slope positions predominate.

Vegetation Composition and Structure. Total species richness is very high for the Series, averaging 25 species. Overstory tree layer is dominated by Shasta red fir, with mountain hemlock frequent, and white fir occasional. Understory is dominated by mountain hemlock, with Shasta red fir frequent, and white fir and Pacific silver fir occasional. In the shrub layer, dwarf bramble frequently occurs, and thin-leaved huckleberry is common, occasionally with high covers. Herb/grass richness is very high for the Series, with one-sided pyrola frequent, and common prince's-pine, queen's cup, leafy pedicularis, western twayblade, and whitevein pyrola common. Moss cover averages 2 percent.

On Forest Service sites, upper layer tree cover is high for the Series, averaging 58 percent. Mid-layer and lower layer tree cover are both low, averaging 25 and 14 percent, respectively. High shrub cover is low, averaging 1 percent. Low shrub cover is intermediate, averaging 24 percent. Herb/grass cover is high for the Series, ranging from 1 to 90 percent, with an average of 26 percent.

On Bureau of Land Management sites, tree cover exceeding 10 feet tall (3 meters) averages 76 percent while tree cover less than 10 feet tall averages 9 percent. Cover for shrubs greater than 20 inches tall (50 centimeters) was absent and cover for shrubs less than 20 inches tall averages 2 percent. Herb cover ranges from 2 to 30 percent, with an average of 13 percent.

Common name	Code	Constancy	Cover	Richness
<u>Overstory trees</u>				2
Shasta red fir	ABMAS	94	35	
Mountain hemlock	TSME	82	24	
<u>Understory trees</u>				3
Mountain hemlock	TSME	100	27	
Shasta red fir	ABMAS	100	8	
<u>Shrubs</u>				4
Dwarf bramble	RULA2	76	3	
Thin-leaved huckleberry	VAME	65	22	
<u>Herbs</u>				15
One-sided pyrola	PYSE	76	3	
Common prince's-pine	CHUM	65	2	
Queen's cup	CLUN2	59	3	
Leafy pedicularis	PERA	59	2	
Western twayblade	LICA10	59	1	
Whitevein pyrola	PYPI2	53	1	
Threeleaf anemone	ANDE3	47	2	