

MOUNTAIN HEMLOCK/HERB

Tsuga mertensiana/Herb

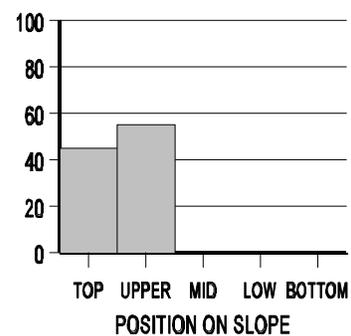
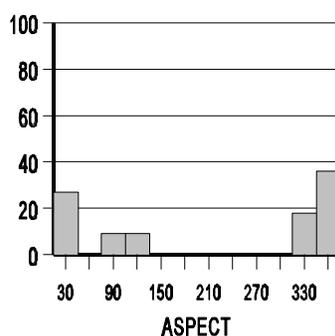
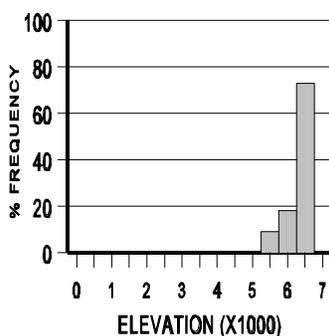
TSME/HERB (N=11; FS=11)



Distribution. Mountain Hemlock/Herb occurs in the Siskiyou Mountain Province on the Ashland and Applegate Ranger Districts, Rogue River National Forest. It may also occur on the Illinois Valley Ranger District, Siskiyou National Forest, and adjacent Bureau of Land Management lands.

Distinguishing Characteristics. Mountain Hemlock/Herb is found at cold temperatures and low precipitation relative to the other plant associations in the Series. The lack of species indicating warmer conditions, such as white fir and Douglas-fir, indicate these conditions.

Soils. Parent material is mostly schist or granodiorite, with some mixed metamorphic or igneous materials. Soils can be shallow or deep, with an average depth of greater than 34 inches. Average surface rock cover is 10 percent, with 4 percent gravel. Based on six plots sampled, surface textures are loam, sandy loam, or loamy



sand, with 15 to 40 percent gravel and cobbles. Subsurface textures are loam, sand, sandy loam, or loamy sand, with 25 to 50 percent gravel and up to 85 percent cobbles.

Environment. Elevation averages 6710 feet. Mountain Hemlock/Herb occurs on northwest to east aspects. Slope averages 33 percent and ranges from 8 to 59 percent. Ridge top and upper one-third slope positions predominate.

Vegetation Composition and Structure. Total species richness is intermediate for the Series, averaging 17 species. Overstory and understory tree layers are dominated by mountain hemlock, with Shasta red fir frequently occurring. Shrub richness is very low for the Series, with shrub species occurring rarely. Herb/grass richness is high for the Series, with mountain heliotrope, skunkleaf polemonium, mountain bunchgrass, and Ross's sedge found commonly. Moss cover averages 1 percent.

Upper layer tree cover is high for the Series, averaging 61 percent. Mid-layer and lower layer tree cover are both low, averaging 28 and 14 percent, respectively. High and low shrub covers are absent on most plots. Herb/grass cover is intermediate for the Series, ranging from 3 to 35 percent, with an average of 15 percent.

Common name	Code	Constancy	Cover	Richness
<u>Overstory trees</u>				2
Mountain hemlock	TSME	100	45	
Shasta red fir	ABMAS	91	21	
<u>Understory trees</u>				2
Mountain hemlock	TSME	100	35	
Shasta red fir	ABMAS	91	4	
<u>Shrubs</u>				1
No shrub species occurs with a constancy greater than 9 percent.				
<u>Herbs</u>				12
Mountain heliotrope	VASI	64	2	
Skunkleaf polemonium	POCA3	64	1	
Mountain bunchgrass	FEVI	55	5	
Ross's sedge	CARO5	55	2	
Heart-leafed arnica	ARCO9	45	7	
One-sided pyrola	PYSE	45	1	
Small flowered woodrush	LUPA4	36	2	
Hood's sedge	CAHO5	36	1	
California false hellebore	VECA2	36	1	
Pussypaws	SPUM	36	1	
Bigleaf sandwort	ARMA18	36	1	
White-flowered hawkweed	HIAL2	36	1	
Sedge species	CAREX	27	2	
Stream violet	VIGL	27	2	
Common yarrow	ACMI2	27	2	
Whitevein pyrola	PYPI2	27	1	
Alice fleabane	ERAL3	27	1	
Leafy pedicularis	PERA	27	1	
Tongue-leaved penstemon	PEAN3	27	1	
Pale fawn-lily	ERGR9	27	1	
Mountain sweet-root	OSCH	18	2	