

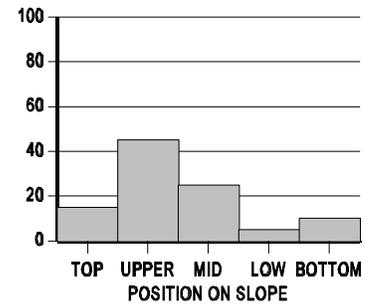
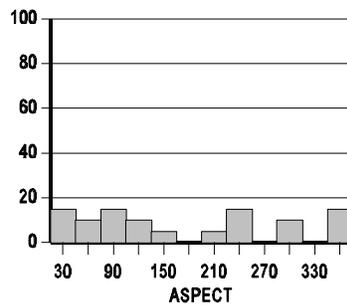
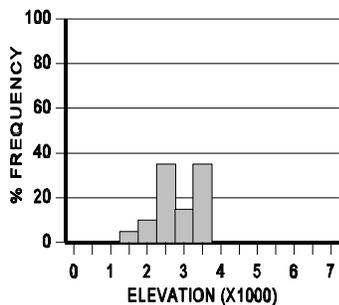
WESTERN HEMLOCK/SALAL-PACIFIC RHODODENDRON-SWO
Tsuga heterophylla/Gaultheria shallon-Rhododendron macrophyllum
 TSHE/GASH-RHMA3-SWO (N=20; FS=20)



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

Distinguishing Characteristics. This Association is on warm sites, although not as harsh as the Western Hemlock-Golden Chinquapin/Salal-Pacific Rhododendron Association. On the Tiller Ranger District it occurs at elevations over 3500 feet. Whipplevine, a rocky site indicator, is generally present.

Soils. Parent material is primarily andesite or basalt, however, occasionally pumice, tephra, andesite, gabbro, sandstone, breccia, or granite may be present. Based on nine plots sampled, soils are moderately deep to deep, and well to moderately well drained. Surface textures are loams and clay loams with 15 to 70 percent rock fragments and 15 to 25 percent clay. Subsurface textures are loams, clay loams,



and clays, with 20 to 70 percent rock fragments. The soil moisture regime is probably udic and the soil temperature regime is probably mesic. Subgroups include: Typic Haplumbrepts, Typic Udorthents, and Mollic Hapludalfs.

Environment. This Association averages 3010 feet in elevation and aspect is variable, though often east or north. Slope averages 34 percent and ranges between 7 and 67 percent. This Association is commonly on upper slopes.

Vegetation Composition and Structure. Total species richness is very high for the Series, averaging 35. The overstory tree layer is dominated by Douglas-fir, and Douglas-fir and golden chinquapin are frequent in the understory. Hardwoods include Rocky Mountain maple, big-leaf maple, red alder, and tanoak; average covers are very low. The shrub layer is dominated by salal, Pacific rhododendron, and dwarf Oregongrape. Whipplevine and twinflower are frequent in the herb/grass layer, the latter at fairly high covers. Rattlesnake-plantain, western sword-fern, common prince's-pine, and round-leaved violet are also frequent, and western starflower, Oregon fairybell, white-flowered hawkweed, and white trillium are common associates. Moss cover is moderate for the Series, averaging 18 percent.

Upper, middle, and lower layer tree covers are about average for the Western Hemlock Series averaging 68, 55, and 41 percent, respectively. High shrubs average 28 percent cover and low shrubs 57 percent cover. Herb/grass cover averages 26 percent.

Common name	Code	Constancy	Cover	Avg. Richness
<u>Overstory trees</u>				4
Douglas-fir	PSME	100	50	
Western hemlock	TSHE	80	9	
<u>Understory trees</u>				7
Western hemlock	TSHE	100	31	
Douglas-fir	PSME	95	4	
Golden chinquapin	CACH6	85	3	
Western redcedar	THPL	70	9	
Pacific yew	TABR2	70	8	
<u>Shrubs</u>				11
Salal	GASH	100	31	
Pacific rhododendron	RHMA3	100	25	
Dwarf Oregongrape	BENE2	100	16	
Red huckleberry	VAPA	90	3	
Vine maple	ACCI	80	14	
Baldhip rose	ROGY	80	2	
Pacific blackberry	RUUR	80	2	
<u>Herbs</u>				17
Western twinflower	LIBOL	100	11	
Whipplevine	WHMO	100	3	
Western sword-fern	POMU	90	3	
Rattlesnake-plantain	GOOB2	85	1	
Common prince's-pine	CHUM	80	2	
Round-leaved violet	VIOR	80	2	