

***PSEUDOTSUGA MENZIESII - ABIES GRANDIS /
HOLODISCUS DISCOLOR / POLYSTICHUM MUNITUM***

Douglas-fir - grand fir / oceanspray / sword fern
Abbreviated Name: PSME-ABGR/HODI/POMU

Sample size = 7 plots

DISTRIBUTION: Known only from San Juan County and a limited area of Clallam County in the vicinity of Sequim. May occur also in northern Island County and in adjacent B.C.

GLOBAL/STATE STATUS: G1?S1. There is only one known relatively good-quality occurrence of this association and several small fragments.

ID TIPS: Grand fir >10% cover or the dominant tree regeneration and little to no western hemlock or western redcedar present. Oceanspray provides >10% cover and either sword fern or common snowberry >5% cover. Swordfern and common snowberry are always present; salal is absent or low in abundance.

ENVIRONMENT: These sites are moderately dry and appear to be relatively nutrient-rich. They are all located in dry climates at low elevations and are most concentrated in areas with the lowest mean annual precipitation in the ecoregion. Usually occurs on plains or short gentle slopes that tend to face toward the north. Parent material is glacial till, glacial outwash, and reworked glacial till and marine sediment. Soil texture is stony loam, loamy sand, or fine sandy loam.

Precipitation: 20-28 inches (mean 22)

Elevation: 30-200 feet

Aspect/slope: W to NE/ 0-22% slope (mean 9)

Slope position: plain, short, mid

Soil series: Roche, Dick, Cassolary

DISTURBANCE/SUCCESSION: In the pre-Western settlement landscape, a moderate-severity fire regime likely prevailed (variable severity, intermediate frequency), probably resulting in more open stands on average. Some stands may have been savannas in the past maintained by more frequent burning. Disturbance by windstorms tends to be relatively more common in this association than most others, and grand fir tends to increase after wind disturbance. Grand fir usually dominates tree regeneration, but

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Vegetation Composition Table (selected species):

Con = constancy, the percent of plots within which each species was found;
Cov = cover, the mean crown cover of the species in plots where it was found.
+ = trace (< 0.5% cover).

Trees	Kartesz 2005 Name	Con	Cov
Douglas-fir	<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	100	48
grand fir	<i>Abies grandis</i>	100	33
western hemlock	<i>Tsuga heterophylla</i>	29	4
Sitka spruce	<i>Picea sitchensis</i>	14	8
Shrubs and Dwarf-shrubs			
oceanspray	<i>Holodiscus discolor</i>	100	23
common snowberry	<i>Symphoricarpos albus</i> var. <i>laevigatus</i>	100	14
baldhip rose	<i>Rosa gymnocarpa</i>	100	9
trailing blackberry	<i>Rubus ursinus</i> ssp. <i>macropetalus</i>	86	6
orange honeysuckle	<i>Lonicera ciliosa</i>	71	3
coast black gooseberry	<i>Ribes divaricatum</i>	71	1
tall Oregongrape	<i>Mahonia aquifolium</i>	57	1
spreading snowberry	<i>Symphoricarpos hesperius</i>	43	5
Indian plum	<i>Oemleria cerasiformis</i>	43	3
serviceberry	<i>Amelanchier alnifolia</i>	43	1
dwarf Oregongrape	<i>Mahonia nervosa</i>	29	22
Graminoids			
Columbia brome	<i>Bromus vulgaris</i>	100	4
Alaska oniongrass	<i>Melica subulata</i>	71	10
western fescue	<i>Festuca occidentalis</i>	71	6
Coast Range fescue	<i>Festuca subuliflora</i>	57	6
Forbs and Ferns			
sword fern	<i>Polystichum munitum</i>	100	9
western starflower	<i>Trientalis borealis</i> ssp. <i>latifolia</i>	86	5
cleavers	<i>Galium aparine</i>	86	4
sweet-scented bedstraw	<i>Galium triflorum</i>	71	3
mountain sweet-cicely	<i>Osmorhiza berteroi</i>	57	1
bracken fern	<i>Pteridium aquilinum</i> var. <i>pubescens</i>	43	5
yerba buena	<i>Clinopodium douglasii</i>	43	2
pathfinder	<i>Adenocaulon bicolor</i>	43	2
Siberian springbeauty	<i>Claytonia siberica</i> var. <i>siberica</i>	43	1
American vetch	<i>Vicia americana</i> ssp. <i>americana</i>	43	1
Pacific sanicle	<i>Sanicula crassicaulis</i> var. <i>crassicaulus</i>	43	+
twinnflower	<i>Linnaea borealis</i> ssp. <i>longiflora</i>	29	4

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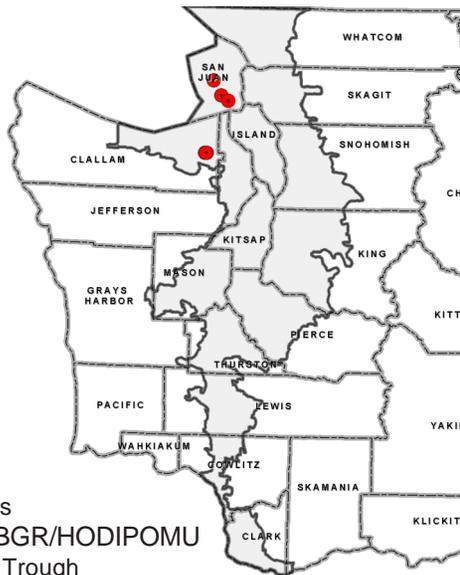
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Douglas-fir regeneration also occurs under a variety of conditions. Grand fir will increase in the absence of disturbance.

VEGETATION: Forest typically co-dominated by Douglas-fir and grand fir. Grand fir always at least dominates tree regeneration or is prominent in the canopy. The understory is always dominated or co-dominated by oceanspray, with common snowberry usually co-dominant and always present. Dwarf Oregongrape occasionally co-dominates. Baldhip rose is prominent. Other very frequent woody plants are trailing blackberry, orange honeysuckle, and coast black gooseberry. The herb layer is less developed than the shrub layer. Most prominent in terms of cover are sword fern and Alaska oniongrass. Western fescue, Columbia brome, western starflower, cleavers, sweet-scented bedstraw, and mountain sweet-cicely are usually present.

CLASSIFICATION NOTES: Chappell (1997) called it part of PSME-ABGR/SYAL/MESU. NatureServe (2005) currently considers it part of PSME-ABGR/SYAL/MESU, though its name will change to PSME-ABGR/HODI/MESU in the near future. The broader type also includes what is herein called PSME-ABGR/FEOC. The latter has less shrub cover and sword fern, and more grass cover than PSME-ABGR/HODI/POMU.

MANAGEMENT NOTES: Stands that have not been previously harvested or mature and old-growth stands, even if they have been disturbed by thinning, should be considered for conservation status. Sites that have already been harvested may be well suited to uneven-aged management.



Chappell, C.B. 2006. Upland plant associations of the Puget Trough ecoregion, Washington. Washington Department of Natural Resources, Natural Heritage Program, Olympia, WA. [\[http://www.dnr.wa.gov/nhp/refdesk/communities/pdf/intro.pdf\]](http://www.dnr.wa.gov/nhp/refdesk/communities/pdf/intro.pdf).