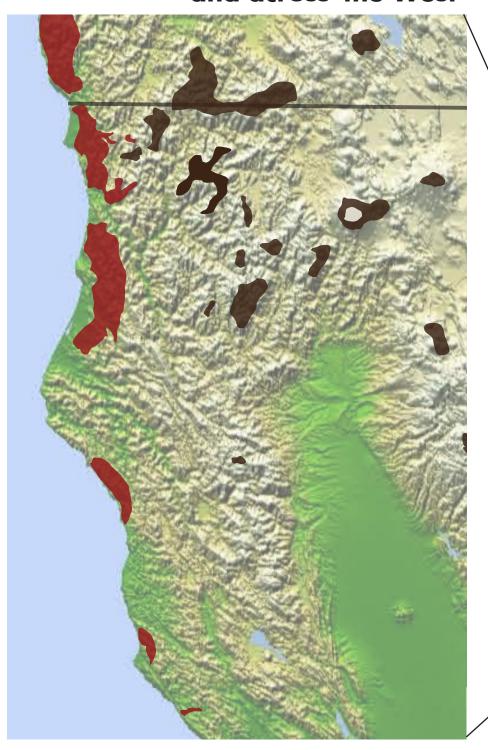
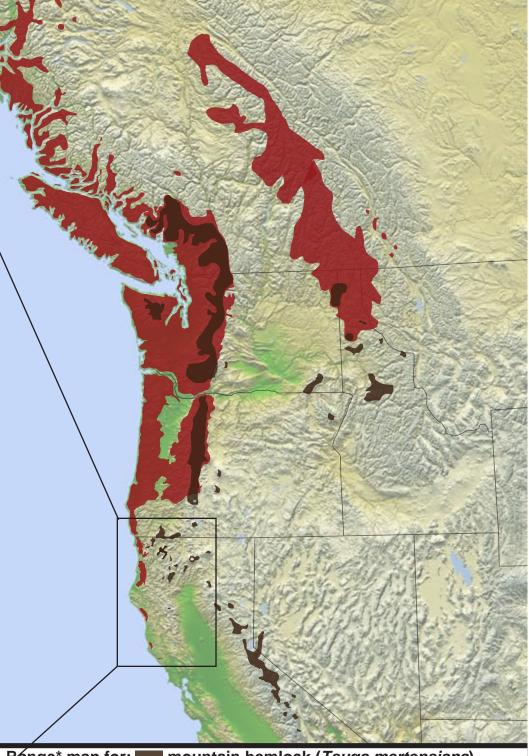
western hemlock and mountain hemlock in northwest California and across the West





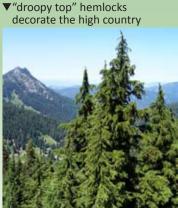
Range* map for: mountain hemlock (Tsuga mertensiana) western hemlock (*Tsuga heterophylla*)

* based on Little (1971), Griffin and Critchfield (1976), and Van Pelt (2001) Michael Kauffmann | www.conifercountry.com

mountain hemlock

Pinaceae Tsuga mertensiana

▶ Brewer spruce cones (left)





Bark: varies from purplish brown to reddish brown (similar to Shasta red fir) but with deep, furrowed, more continuous rounded ridges Needles: 1/2"-3/4", dark green to blue green, bluntly rounded, commonly with stomatal bloom on both sides; spirally arranged on twig imparting a star-like appearance Cones: 2"-5", reddish brown turning brown with maturity; larger cones similar to Brewer spruce; can remain on tree year-round **Habitat**: Highest elevations on north face of mountains or cool streamside glades from 4000-9000 feet, upper elevation specimens can grow on south-facing slopes

western hemlock

Pinaceae Tsuga heterophylla



- ◀ star-like needle growth and small cones are a diagnostic character of this species
 - ▼ this "nurse-log" phenomenon is a common sight in old-growth forests of coastal northwest Caifornia



Bark: thin and slightly furrowed with long linear strips, varies from grey (outer) to dark red (inner); bases of large trees often buttressed Needles: 1/4" - 3/4" similar to lower redwood needles, but shorter and less uniformly flat, splaying out from the branch at varying angles, dark green above with two white stomatal lines below, glossy green below Cones: one inch and egg shaped with thin scales, scale length similar to the largest needles Habitat: cool and wet forest along Pacific Coast Range: North Coast; within 20 miles of the ocean with few excep-

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