

regeneration of amabilis fir and mountain hemlock. There are a few small herbs (five-leaved bramble, rosy twistedstalk, clasping twistedstalk, deer fern, bunchberry, heart-leaved twayblade, Indian hellebore, and foamflowers) and a moss layer that characteristically includes pipecleaner moss, curly heron's-bill moss, and mountain leafy liverwort. A striking feature of the MH is the abundance of yellow-green lichen hanging from the trees.

**Soils:** (Table 4.2) Soils of the MH zone are predominantly Ferro-Humic and Humo-Ferric Podzols and Folisols with Mor humus forms. Dominant factors affecting soil development are the heavy snowpack and continuously cool, wet conditions. Soils are acidic and highly leached, and fungal decomposition predominates. Many soils show signs of mottling or gleying because they remain moist or saturated throughout the year. Organic matter builds up because decomposition rates are slow. The organic layers are often visibly compacted by the weight of the snowload. Plant roots are mainly confined to organic layers, which suggests that these layers play a vital role in ecosystem nutrient cycling. Wetlands with acidic, Organic soils are very common in the western part of the zone where the terrain is less steep and the climate is particularly humid.

**Differentiating Features:** The MH can be distinguished from the CWH and ICH by the dominance of mountain hemlock over western hemlock, either in the canopy or in regeneration layers. Absence of deciduous trees and seral conifers such as lodgepole pine is also characteristic. Low species diversity and moss layers dominated by pipecleaner moss, heron's-bill mosses, and mountain leafy liverwort, rather than by step moss or lanky moss, are diagnostic features of the understory. The boundary between the MH and ESSF is usually drawn along the height of the Coast Mountains divide, but separation of these two zones can be difficult in areas where the transition from coast to interior is gradual. In general, the MH has more mountain hemlock, amabilis fir, and western hemlock, and less subalpine fir, than does the ESSF. Alaskan blueberry and pipecleaner moss are characteristic MH species that are scarce or absent in the ESSF.

**Subzones and Variants:** (Figures 4.7 and 4.10; Table 4.5) The MH in the south half of the PRFR has been divided into two forested subzones on the basis of regional climate. Each subzone is further subdivided into windward and leeward variants:

**MH<sub>mm</sub> - Moist Maritime (Forested) subzone**

**MH<sub>mm1</sub> - Windward variant**

**MH<sub>mm2</sub> - Leeward variant**

**MH<sub>wh</sub> - Wet Hypermaritime (Forested) subzone**

**MH<sub>wh1</sub> - Windward variant<sup>7</sup>**

The **MH<sub>mm</sub>** includes all of the subalpine forest lying within the mountainous portion of the zone, east of the Hecate Lowland. Mountain hemlock, amabilis fir, and western hemlock are the characteristic dominant

<sup>7</sup> The leeward variant (**MH<sub>wh2</sub>**) occurs outside the PRFR on the Queen Charlotte Islands.