

BGC Units

Subalpine fir, hybrid white spruce, and lodgepole pine are dominant species; amabilis fir is absent, mountain hemlock is rare, and whitebark pine is occasionally present on the driest sites.

The **ESSFmk** occurs as a narrow (30 km wide at most) band along the leeward, eastern flanks of the Coast Mountains, south of the Telkwa Pass. It also occupies much of the subalpine elevations of the Tahtsa Ranges and Bulkley Ranges in the Burnie River area. The ESSFmk is the warmest of the three ESSF subzones. It also differs from the others in that it lies in a rainshadow of the Coast Mountains that receives low summer rainfall (total precipitation about 1000 mm), but experiences relatively snowy winters with minimal ground freezing. This combination allows for the growth of mountain hemlock and amabilis fir. Whitebark pine is also a common and distinctive feature of the ESSFmk, particularly on dry, rocky sites. The relatively dry summer climate seems to be responsible for a low diversity of herb and moss species. Increased presence of mountain leafy liverwort and lichens are characteristic of the ESSFmk.

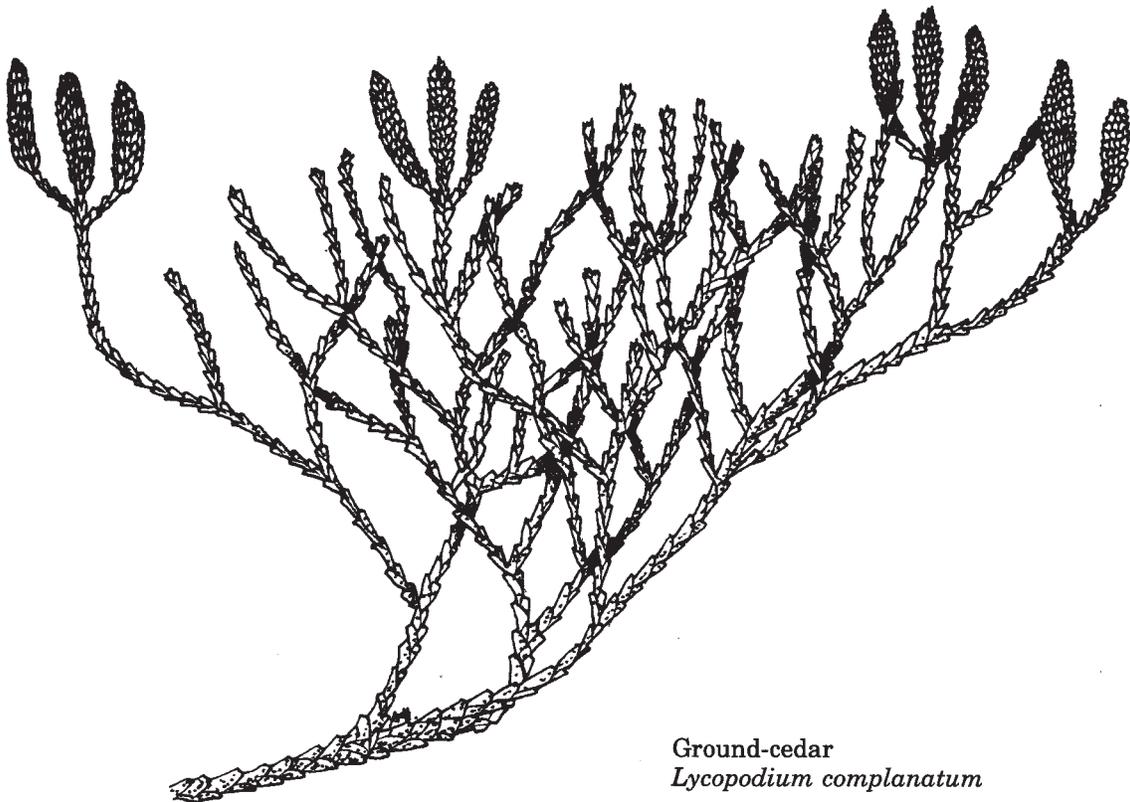
The **ESSFmv** extends into the PRFR from the Prince George Forest Region to the east. The **ESSFmv3**, or Omineca variant, occupies a few high-elevation areas east of Babine Lake. It is of very limited extent in the PRFR and is not described in this guide. Readers should refer to MacKinnon *et al.* (1990) or use the descriptions provided here for the ESSFmc. The occurrence of white rhododendron in the ESSFmv3 is the main floristic distinction between these two biogeoclimatic units.

The ESSFwv is the most northerly ESSF subzone. It lies above the ICH zone and portions of the CWHws2 in the Hazelton Mountains, Skeena Mountains, Nass Basin, and along the eastern flanks of the Coast Mountains north of the Nass River. The ESSFwv has a snowy winter and a moister growing season than the other two subzones. Mean annual precipitation is 650 - 1100 mm, and growing season moisture deficits are unlikely. Climax forests are dominated by subalpine fir, with lesser components of mountain hemlock, hybrid white spruce, and western hemlock. Lodgepole pine is rare and whitebark pine is absent. This subzone has a greater diversity of shrubs and herbs than the other subalpine subzones, including many typically coastal species.

Above each of the forested subzones, there is a corresponding parkland subzone/variant (the ESSFmcp, ESSFmkp, ESSFmvp3, and **ESSFwvp**) occupying the transition from treeline to true alpine tundra (AT zone). These parkland subzones and variants share many of the classification features of their forested counterparts, but the harsher climate and lingering snowpack do not allow the growth of continuous forests. Instead, there is a mosaic of tree islands interspersed with heath vegetation (i.e., dwarf shrubs, usually of the heather, family) and subalpine herb meadows. Subalpine fir is the dominant tree throughout. Mountain hemlock is common in tree clumps of the ESSFmcp and ESSFwvp, but is rare in the ESSFmvp3 and absent from the ESSFmvp3. Compared to the two westerly subzones, the ESSFmcp and ESSFmvp3 also tend to have more subalpine forbs, grasses, and sedges, and less heath vegetation.

Devil's club is a typical ESSF species that is absent from the SWB. Where the ESSF overlies the ICH, the two zones can be differentiated by the relative abundance of western hemlock: in the ICH, western hemlock is the dominant species on zonal sites; in the ESSF, subalpine fir and mountain hemlock are more abundant than western hemlock. The differences between the ESSF and contiguous SBS are fairly subtle. The transition to ESSF is marked by a gradual shift in a dominance from hybrid spruce to subalpine fir, an increased dominance of shrubs in the heather family in the forest understory, and the appearance of subalpine herbs and dwarf shrubs in small forest openings.

Subzones: All but a tiny fragment of the ESSF in the Cassiar Forest District is classified as **ESSFwv** (Wet, Very Cold Forested subzone), and above it is the **ESSFwvp** (Wet Very Cold Parkland subzone). The headwaters of the Spatsizi River at Tahtsadle Creek are within the **ESSFmc** and **mcp** (Moist Cold Forested and Parkland subzones). No variants of these subzones have been identified. For information on how to distinguish these subzones, refer to the southern ESSF (Section 4.2.3; Table 4.5 and Figure 4.7).



Ground-cedar
Lycopodium complanatum