

# BGC Units

shrubs, fens, and Altai fescue grassland occupies the valley floor, a skirt of conifers occurs on lower slopes, and shrubs again dominate above the conifers.

**Soils:** (Table 4.8) Soil development in the SWB is generally not far advanced because of recent glaciation and the cold climate. The processes of frost shattering, solifluction, nivation, and cryoturbation, as well as colluviation and snow avalanching, are all active. Zonal soils in the SWB are Humo-Ferric Podzols or Brunisols, depending on the amount of precipitation (Brunisols are more common in areas of lower rainfall). Depending on the acidity of the parent material, both Eutric (high pH) and Dystric (low pH) Brunisols can occur. On fine-textured parent materials, Gray Luvisols are also found. Gleyed Regosols, Humic Gleysols, and shallow Organics occur beneath the wet willow thickets and wetland vegetation found in many of the valley floors. Cryosols (soils with permafrost) exist in high, wide valleys subject to cold air ponding, especially in finer-textured parent materials above 1200 - 1400 m elevation. Elsewhere in the SWB, permafrost is sporadic, occurring in pockets, mainly on north slopes.

**Differentiating Features:** The SWB could be confused with higher elevations of the BWBS zone, or with the ESSF where the two zones meet along the southern and western margins of the Cassiar Forest District. The SWB has less productive, more intermittent forests, more subalpine fir, fewer deciduous and pine trees, and more willow-birch scrub than does the BWBS. Understory vegetation in the SWB is dominated by willows and scrub birch, while the ESSF understory is dominated by shrubs of the heather family (black huckleberry, oval-leaved blueberry, and false azalea).

**Subzones and Variants:** Several subzones of the SWB have been tentatively identified, but none of these have yet been mapped or described sufficiently for inclusion in this guide. However, the Tatshenshini-Alsek area has a distinctive SWB, which is tentatively called the **SWBvk**, or very wet cool subzone. This very snowy subzone is primarily non-forested, although it has scattered open stands of white spruce and black cottonwood, both of which (but more commonly cottonwood) form timberline, such as it is. The dominant vegetation is dense shrubby thickets of medium to tall shrubs, especially Sitka alder and willows (variable, Barclay's and Alaska willows). There is very little scrub birch, in contrast to the rest of the SWB. Moist, lush meadows are common and widespread, including a distinctive fireweed - red raspberry - cow parsnip association that appears to persist without fire.