

Prognosis^{BC} version 3.0 Release Statement September 2003

Prognosis^{BC} is an individual tree, distance independent (i.e., non-spatial) growth and yield model. It can be used to simulate the development of complex (i.e., mixed species, multi-layered) stands comprised of one or more of the following species: white pine, larch, Douglas-fir, grand fir, western hemlock, western redcedar, lodgepole pine, Engelmann spruce, subalpine fir, ponderosa pine, aspen and birch and cottonwood. The model is British Columbia's adaptation of the US Forest Service Forest Vegetation Simulator (FVS).

The current version for use in BC is called the Southern Interior of BC variant (SIBC). This version is based on BC data and its geographical scope is no longer limited to site associations common to both the southeastern interior of British Columbia and North Idaho. It is based on Permanent Sample Plot (PSP) and Temporary Sample Plot (TSP) data. Corporate PSP data were used to develop and validate the large tree (> 7.5 cm in diameter) growth and mortality components. Juvenile tree development was based on TSP data. All growth and mortality components of the new version are based on BC data and are indexed by BEC classes.

The individual model components were validated and sensitivity analyses performed under a wide range of tree and stand conditions. Furthermore, real and artificial stand data were also used to examine and verify the overall performance of the growth and yield simulator. This included long term projections of stand volume, basal area, height development, and height-diameter ratios as well as crown development.

Early releases of the SIBC will have limited scope with respect to biogeoclimatic zones – others will be added based on availability of resources including suitable calibration data. The current release (3.0) is for the Interior Douglas Fir biogeoclimatic zone..

Users should consider using Prognosis^{BC} to project ground based inventories that describe multi-layered and partially cut mixed species stands, *WinVDYP to project even-aged, natural stands*, and *WinTIPSY* to conduct all bareground projections. Future releases of Prognosis^{BC} and TASS III will address mixed species, bareground projections.

Prognosis^{BC} Version 3.0 and supporting documents including the revised use policy will be available for download from the Ministry's web site. The earlier version (2.0) will also be maintained in the interim.

<http://www.for.gov.bc.ca/hre/gymodels/progbc/index.htm> .