

News from the Inventory Section, Forest Analysis and Inventory Branch, Ministry of Forests Lands and Natural Resource Operations

October 11, 2011

Progress to mid-year

At the end of September, the Inventory Section completed its mid-year budget and project reviews. Of the 40 major projects itemized on the section budget, 12 are complete, 23 are underway and on schedule, two are underway and behind schedule, and three are not yet started. An additional three projects, planned at the beginning of the fiscal year, have been deferred to 2012-13. At this time, 98% of the section budget is allocated. Projects this year include air photo acquisition, photo-interpretation, ground sampling, inventory analysis, site productivity work, the development of a young stand growth and yield monitoring program, update and projection of the provincial inventory, projects to improve the ministry's stand growth models (i.e., TASS, TIPSYP, and VDYP), and projects to develop new methods and incorporate new technology into forest inventory. For more information on the status of Inventory Section projects, contact Gary Johansen (Gary.Johansen@gov.bc.ca; 250-356-0633).

Air photo acquisition

Despite the cloudy weather early this summer we successfully acquired air photos for all planned areas. Traditional film imagery was captured in the Williams Lake and 100 Mile House areas to fill gaps in the coverage of 2010 photography. Digital imagery was captured in the Kamloops, TFL 14, TFL 23 and Sunshine Coast areas. The image processing phases are underway and on track for completion by the end of March, 2012. Once completed all imagery, softcopy sets, and orthophotos will be made available on the GeoBC Image Warehouse. This project is a collaborative effort between Forest Analysis and Inventory Branch (FAIB) and GeoBC. Inquiries can be directed to Kutalmis Saylam at GeoBC or Ann Morrison at FAIB (Ann.Morrison@gov.bc.ca; 250-953-3625).

TASS

We are continuing to enhance TASS to address climate change scenarios. Currently, we are incorporating into TASS an algorithm stemming from a recently-published paper on transfer functions (*O'Neill G.A. and G. Nigh, 2011. Linking population genetics and tree height growth models to predict impacts of climate change on forest production. Global Change Biology 17, 3208–3217*). This enhancement will create first-approximation yield adjustments and allow users to explore climate change mitigation strategies. Incorporation into TIPSYP is likely to occur in 2012-13. For more information, contact Jim Goudie (Jim.Goudie@gov.bc.ca; 250 387-6535).

Haida Gwaii

High winds and heavy rain in late September made field work challenging. Nevertheless, the first field component of the new VRI inventory on Haida Gwaii was successful. This inventory is jointly managed by the Province and the Haida Nation. Local interest in a new inventory is very high. For more information on this unique project, contact Roman Bilek (Roman.Bilek@gov.bc.ca; 250-387-6043).

Tree Volume

Improvements to the estimation of gross and net tree volume are ongoing through the testing of an improved taper equation and the calculation of statistically based net (decay and waste) volume correction factors (NVAFs). Recently, regional NVAFs have been calculated for all locations in BC and applied to all VRI and monitoring ground samples. Biases in the estimation of net volume by both sets of loss factors (BEC and 1976) and taper equations (BEC and appraisal) have been calculated at the species, age group and risk group levels. For more information on this work, contact Will Smith (Will.Smith@gov.bc.ca; 250-356-6853).

Site Productivity

A large program of SIBEC sampling in Morice and in the Cariboo has concluded for the year. Data will soon be available to update the provincial SIBEC database. A PEM project in Kootenay Lake is underway. A draft PEM will be produced this fiscal with the accuracy assessment and final PEM planned for next fiscal. To improve user access to site index estimates, we have begun to develop a province-wide GIS layer for site index. For more information on site productivity work, contact Ron Planden (Ron.Planden@gov.bc.ca; 250 387-6867).

Monitoring

The Inventory Section is developing a permanent plot program to monitor young stand growth and yield. The program will target beetle-impacted areas where young stand growth rates are critical to mid-term timber supply. By the end of October, we aim to post to our web site a draft document that outlines the sample design and host a discussion with a stakeholder focus group. For more information on this program, contact Tamara Brierley (Tamara.Brierley@gov.bc.ca; 250-356-0703).

Web site

The Inventory Section has completed a revision of our web site. Check it out at <http://www.for.gov.bc.ca/hts/inventory.htm>. Improvement suggestions, and requests for information that you'd like posted, are warmly welcomed to John Wakelin (John.Wakelin@gov.bc.ca; 250 387-5262).

100 Mile House and Williams Lake

Approximately 1,464,000 hectares on 106 mapsheets are being re-inventoried in the 100 Mile House TSA. The polygon delineation phase of this project is progressing well and is slightly ahead of schedule. The eastern third of the Williams Lake TSA (approximately 1,500,000 hectares) is currently being photo-interpreted under a number of contracts. Fifty five maps have been completed, with the remaining 73 scheduled for completion by March, 2012. For more information on these projects, contact Matt Makar (Matt.Makar@gov.bc.ca; 250-828-4427).

LVI

The Inventory Section is developing a method that generates inventory information that is current, relatively inexpensive, but lower resolution than conventional VRI. This method, LVI (Landscape Vegetation Inventory), utilizes Landsat data, low level photography, and nearest neighbour matching to map forest cover polygons and assign attributes. An operational test of LVI in west Quesnel is now complete. The data has been provided to users to explore its potential use in timber supply analysis and forest management planning. For more information contact any one on the remote sensing team: Xiaoping Yuan (Xiaoping.Yuan@gov.bc.ca; 250-953-3626), Ann Morrison (Ann.Morrison@gov.bc.ca; 250-953-3625), and Chris Butson (Christopher.Butson@gov.bc.ca; 250-953-3720).