

British Columbia's Forest Investment Account – Forest Science Program (FIA-FSP) funds research and extension to improve sustainable forest management in BC. Since 2004, FIA-FSP has provided more than \$50 million in funding, with much of this investment directed towards issues specific to interior forests. Below are a few examples of the many projects relevant to the forest industry in the interior of British Columbia.

What do people value in B.C.'s forests, and how do these values differ across communities? **Drs. Howie Harshaw** and **Stephen Sheppard** from the University of British Columbia have spent several years conducting research to answer this question; their ultimate goals are to quantify these values and understand how they differ across communities, incorporate these values into social indicators for forestry planning, and recommend strategies for maintaining resilient, sustainable communities. Approaches for measuring sustainable forest management, such as the Canadian Standards Association's (CSA) Criteria and Indicators framework, require forest companies to track indicators of social sustainability within local communities. For forest companies to track meaningful indicators of social sustainability, they need a good understanding of what local communities value in their forests. For example, if people in the surrounding community place a high value on recreation opportunities and wildlife harvesting, companies should be tracking some measure of these opportunities to ensure that they are not being negatively affected by forestry operations. Harshaw and Sheppard have tackled this topic by canvassing local communities around nine of Canfor's divisions in the interior of BC, a process which revealed some interesting and unexpected findings about how communities in this area of the province use and value the forests (see http://www.forrex.org/publications/link/ISS45/vol9_no1_art1.pdf for a summary of the findings). Harshaw and Sheppard are now collating information from this and other surveys that they have conducted in BC to pinpoint useful indicators of social sustainability in forestry that go beyond the usual data pulled from census reports to really look at the issues relevant to forest-dependent communities. For more information on this project, see the project website: <http://www.sfm-pos.ca>.

Maintaining soil productivity is also a critical component of sustainable forest management: the recovery of an ecosystem after disturbance depends heavily on maintaining soil-based processes. But appropriate quantitative measures of soil health that are linked to overall forest productivity are lacking. To address this gap, **Steve Day**, strategic planning and certification forester with Canfor, has been working with researchers from UBC to develop a quantitative measure of soil productivity based on forest floor mass and soil organic matter (SOM). After extensive field testing, this measure is now being used within a predictive ecosystem model (FORECAST) to project targets for that indicator and compare them against thresholds of long-term productivity. As Day explains, "Being able to project a measure of soil productivity is particularly important in the face of the mountain pine beetle outbreak, to help us understand the impacts of current management decisions on future soil productivity." For example, the interior of British Columbia is braced for a dip in timber supply in the near future, which increases the pressure to regenerate the forest as quickly as possible. As options such as replanting pine at low densities, fertilizing dense pine stands, and establishing mixed-species stands are being weighed within this context, forest managers need to understand how the various options will affect future soil productivity.

Day explains, "The research will ultimately tell us which management strategies for mountain pine beetle can produce the highest mid-term and long-term volume without unduly compromising soil productivity."

Providing funding for relevant, applied forestry research is critical to FIA-FSP's success. Annual research investment priorities are guided by a 14-member Forest Science Board and several advisory committees comprised of operational foresters and scientists from industry, government, universities, and First Nations, as well as extension professionals. The Board also oversees and contributes guidance to a provincial forest extension program that is designed and delivered by FORREX Forest Research Extension Partnership. Currently, 12 FIA-FSP research projects, valued at almost \$1.5 million, are being led or have been completed by industry proponents. Forest companies also contribute cash and in-kind support to research projects led by other proponents. For more information, see www.fia-fsp.ca. Completed project reports are found at <http://www.for.gov.bc.ca/hcp/fia/searchreports.htm>.