

Non-timber Forest Products – Can Timber and Non-timber Products be managed compatibly?

Pine mushrooms. Chanterelles. *Vaccinium* berries. White pine boughs. These are all examples of non-timber forest products (NTFPs), an important forest resource that includes all human-exploited uses of plant and fungal species from the forest, other than timber, pulpwood, shakes or other wood products. While many of these forest products have been used for generations by First Nations, they are gaining increasing importance in forest-dependent communities as an additional source of revenue to support community health and stability. Recognizing both the non-economic and economic value of this resource, the BC Forest Investment Account—Forest Science Program (FIA-FSP; <http://www.cortex.ca/fia-fsp/index.html>) is funding research, synthesis and extension of NTFPs to support their compatible management with timber products in British Columbia.

Non-timber forest products in BC have considerable economic value. A recent study funded through the FIA-Forest Science Program reports that the BC market for floral greens and wild mushrooms alone is valued at more than \$69 million per year. But as an unregulated industry in BC, NTFPs are rarely considered in forest management plans. This is unfortunate, since appropriate forest management in areas with high potential for growing products such as berries can greatly improve the harvest quality, leading to much higher yields and economic returns. In the words of Jim Chamberlain, Coordinator of the Research Group Non-Wood Forest Products (NWFPs) of the International Union of Forestry Research Organizations (IUFRO), “a great opportunity is being missed by not incorporating NWFPs into forest management strategies.”

Research being conducted through the FIA-Forest Science Program is aiming to improve this situation. Through the Timber Growth and Value Program, funding for NTFP research has been focused on the following areas:

- a. Development and assessment of techniques for producing other resources in conjunction with timber production under various silvicultural systems;
- b. Developing innovative methods to inventory and value NTFPs, using multi-media and multi-scale approaches;
- c. Defining relationships between high value NTFPs, forest site conditions and stand dynamics; and
- d. Assessing impacts of environmental factors on marketable non-timber resources.

Scientists from the Centre for Non-timber Resources (CNTR) at Royal Roads University have worked with colleagues from the Ministry of Forests and Range, Pacific Forestry Centre of Natural Resources Canada, and other agencies and institutions to guide the development of the FIA-FSP research priorities related to NTFPs, and have conducted some of the initial research and synthesis work in this area. As Wendy Cocksedge, Research and Extension Coordinator at the CNTR explains, “We are still at the very early stages of NTFP research in this province, with research needs and knowledge gaps not very well understood.”

To that end, the FIA-FSP has funded a team of experts from a variety of different fields to jointly mine several existing bodies of knowledge to determine what information already exists on (a) compatible management of timber and NTFPs and (b) the co-production of NTFPs with other non-timber values such as wildlife, biodiversity, and forest based recreation. "The intent of recommending approaches on managing NTFPs is not to add another layer of complexity to forest management, but rather to help coordinate NTFP enhancement with existing sustainable forest management planning for the benefit of both forest companies and NTFP users," explains Cocksedge.

One of the most important aspects of NTFP research and management in British Columbia surrounds the cultural use of plants and other products. Virtually all NTFP research funded through the FIA-FSP has strong First Nations involvement, as managing NTFPs is strongly tied to traditional ecological knowledge, maintaining cultural values and developing economic opportunities for First Nations communities. The topic is of particular importance in areas of the province impacted by the mountain pine beetle, where timber salvage is limiting access by Elders to traditionally important plants. Cocksedge describes a FIA-FSP funded research project looking at the spatial and quality attributes of culturally important NTFP species in mountain pine beetle affected areas of the Cariboo-Chilcotin, which is being done in collaboration with the Xats'ull and T'exelc Nations: "Right now, conventional vegetation inventories don't include information about the quality of the understory species. This project is essentially developing that methodology, by going into the field with Elders and getting their opinion on the quality of growing sites for berries and other products." Now in its second of three years, the project will eventually allow forest managers to locate and maintain areas of high value for NTFPs like *Vaccinium*, and use forest management techniques such as high pruning and thinning to improve harvests of these products.

In a project being carried out by scientists from the BC Ministry of Forests and Range and the Pacific Forestry Centre on forest planning and compatible management, data on stand attributes, habitat characteristics and chanterelle productivity are being collected in commercial chanterelle forests on Vancouver Island. Similar work has been done throughout the province on pine mushroom habitat. Unfortunately, finding ways to increase compatible management of timber and non-timber resources in BC is not as simple as just filling research gaps. With the current volume-based tenure system in place throughout most of the province, economic incentives for forest companies to manage for NTFPs are minimal. Most companies that manage for NTFPs do so for other reasons, either as part of Sustainable Forest Management Plans for certification or as a community service. While the government has established an interagency committee to coordinate activities and information on NTFPs within government and stakeholder groups, Cocksedge cautions about applying regulations across the board in BC: "We have to recognize that NTFP production is community-based, so regulations really need to be specific to local communities."

In anticipation of increased interest in the NTFP market, the FIA-FSP has provided funding for the CNTR to develop a package of readily accessible extension and professional development materials on the compatible management of timber and NTFPs. Initially aimed at forest managers from community forests, woodlots and First Nations, this information will include detailed case

studies describing compatible management for timber and specific NTFPs, on-line professional development modules and a detailed bibliography of resources. "We anticipate that this information will be very much in demand, as local communities and First Nations increasingly turn to NTFPs to both support community health and culture, and as an alternate source of income." Funded in 2007-08, some extension products are currently available on the CNTR website, and others should be available by March 31, 2008.

For more information on NTFPs, visit the Centre for Non-Timber Resources website: www.royalroads.net/ntfp or the Ministry of Forests and Range website: <http://www.for.gov.bc.ca/hre/ntfp/>. For a list of NTFP-related projects funded through the FIA-FSP, see <http://www.for.gov.bc.ca/hcp/fia/searchreports.htm>.

The FIA-FSP funds applied research and the extension of forest science results to meet the information needs and priorities of those who plan and manage British Columbia's public forest lands. In 2007/08, the FIA-FSP is investing \$11.6 million in research projects related to sustainable forest management and improving timber growth and value. Another \$2.8 million will be invested in extension activities to deliver existing information that is not currently accessible to users, as well as new information resulting from research funded through the FIA-FSP and other organizations. The 2008/09 Call for Research Proposals was issued in early August 2007; letters of intent were due on October 10th 2007. For more information, see www.fia-fsp.ca.