

DEVELOPING NONTIMBER FOREST PRODUCTS IN CANADA

INTRODUCTION:

Nontimber forest products (NTFP) are botanical products growing in forests that can be used for food, medicine, ornamental and industrial purposes. Recent international and national successes in the NTFP industry have attracted the attention of politicians, entrepreneurs, economic development agencies and First Nations communities as a means to improve the quality of life and reduce poverty in rural Canada.

With a current yearly output of \$241 million, nontimber forest products contribute significantly to the welfare of rural and First Nations communities in Canada. Because of increased access to international markets by entrepreneurs along with a growing international demand for NTFP, it may be possible to double or triple Canada's harvest of NTFP. Maple sap products, wild mushrooms and wild fruits are the most important NTFP for consumption in Canada and abroad.



Boughs of balsam fir destined for the nontimber products market.

In North America, NTFP encompass a wide variety of products, including conifer boughs, wild rice, wild blueberries, and medicinal herbs. In British Columbia, 200 types of NTFP are recognized; in Ontario, 50 types are commercially used. It is possible that there may be as many as 500 in Canada.

NTFP DEVELOPMENT:

Development needs are threefold for NTFP. First, it is essential to understand how NTFP grow to promote their conservation through sustainable harvesting and culture techniques. Second, gatherers and entrepreneurs need to understand the biology of NTFP to optimize harvesting operations. And third, some NTFP will eventually require

domestication to meet demands and avoid depleting the sustainability of the natural harvest. To achieve this, a sound understanding of NTFP genetics, biology, and ecology will be needed.

Two general types of knowledge are available regarding NTFP. First, historic or traditional knowledge that has been gleaned and "field tested" by countless generations of First Nations people, Canadians of various ethnic origins, and consumers of NTFP. Often, this information far exceeds the scientific knowledge available for a particular product. First Nations people have a great deal of experience in the management of berries, roots, and other materials essential to their lives. These management experiences include the use of fire, harvesting techniques, planting, and various levels of cultivation. The second type of knowledge necessary to the NTFP industry, scientific knowledge, is gained

through the study of the natural history of plants and hypothesis testing using experimental techniques. Both knowledge types are important in the sustainable production of NTFP.

It is difficult to determine the actual potential of NTFP outputs in Canada. We have estimated the potential NTFP harvest at \$1 billion per year based on two premises: 1) the current yield of NTFP is limited to less than \$1.00 per ha of productive forest land (approx. 233 million ha in Canada) and so, we estimate that this figure could be increased four- to five-fold through exploiting new markets and products; and 2) there is a high demand for various types of NTFP by international markets while local pilot studies suggest that NTFP harvesting may not meet those demands.



The bolete mushroom, an edible non-timber product.

CONCLUSIONS:

Further development of the NTFP industry should be associated with adequate training of harvesters in terms of NTFP biology to maximize profits while achieving biological sustainability. As well, research should emphasize the inventory and domestication of specific NTFP to meet growing demand, increase revenues through value added products, and promote biodiversity conservation. Fueled by increased knowledge of the economic potential of NTFP, the near future should yield exciting new developments in this field.

MANAGEMENT IMPLICATIONS:

An expanding new NTFP industry will require the forestry profession to adapt to novel uses of forest resources. Whereas NTFP operations have been overlooked by mainstream forest agencies, there is a growing need for governments to take an active role to facilitate the development of the NTFP industry through research and technology. Where possible, NTFP areas should be identified and gathering for personal and commercial use encouraged. Similarly, fire-disturbed forests should be

envisioned by forest agencies as sources of marketable fire-dependent mushrooms. As well, research should be conducted to include NTFP harvest in forestry operations. Ultimately, the NTFP industry should become a strong contributor to the Canadian forest sector and the Canadian economy.

SOURCES OF RELEVANT INFORMATION:

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