Harvest, employment, and values for NTFP in the US: what we know and what we don’t.

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Abstract: Having robust and long-term data on the value and volume of NTFP can provide decision makers with an understanding of the contributions NTFP make to local and regional economies, and a means to incorporate NTFP forest management modeling. A conservative estimate of the contribution of nontimber forest products (NTFP) to the US gross domestic product is $5 billion per year, or 0.05 percent. Businesses in the nontimber forest products (NTFP) industry are generally small, employing few people. Managers and policy makers are recognizing that sustainability is both culturally and biophysically dependent. NTFP are a significant contributor to household economies and income, for which almost no data is collected. It is becoming increasingly important to determine how to assess species inventory, monitoring, and harvests at local and regional levels, and data on price and harvester costs has become a significant need.

Keywords: nontimber forest products, valuation, policy
Over the last decade, market demand and interest in managing forests for nontimber forest products (NTFP) has grown tremendously. The collection and trade of these products may be crucial to the economic well being of rural people and communities. One of the major obstacles in integrating NTFP into forest management is the lack of understanding among decision makers of their economic importance. Having robust and long-term data on the value and volume of NTFP can provide decision makers with an understanding of the contributions NTFP make to local and regional economies, and a means to incorporate NTFP forest management modeling. Other significant information gaps are an understanding of commercial harvest labor structure, commodity chains, and the influence of prices on access and property rights on harvest techniques.

A conservative estimate of the contribution of nontimber forest products (NTFP) to the US gross domestic product is $5 billion per year, or 0.05 percent. Although domestic production and sales figures are difficult to come by, export values tell us something about the significant of these products to the US economy. Exports of wild blueberries total about $13 million/year and maple syrup and sugar exports average $3 million per year. In 1997, exports of American matsutake (*Tricholoma magnivelare*) were $9.5 million, and in 1998 moss and lichen exports totaled $13 million. In the same year, $9 million worth of pine oil (*Pinus* spp.) was exported from the US. Domestic markets for NTFP are also significant. In 1999, retail sales of herbs amounted to $690 million, including wild harvested, wild-simulated agroforestry, and domestic. In the east, harvesters are paid as much as $2.5 million for black walnuts (*Juglans nigra* L.) (Alexander 2003; Alexander 2004). The floral market in OR, WA and southwest BC was estimated at $107 million in 1994 (Blatner and Alexander 1998). Louisiana ntfps may amount to $11 million (Alexander 2003).

Wages for NTFP harvesters are variable, and not regularly collected. Some studies of mushroom harvesting have estimated harvester wages as part of the assessment of data. Studies estimating wages for harvesters of wild edible mushrooms vary depending on the species and the year. Acker (1986) said that an average wage for a mushroom picker in the mid-80s was $830 seasonally, with a few people earning a maximum of $4,000. In an assessment of American matsutake in the Nass Valley in British Columbia, Meyer Resources (1995) found that harvesters earned an estimated $4,500 per season in the early 1990s. Love et al. (1998) estimated wages for commercial mushroom harvesters in the Olympic Peninsula in Washington at about $30 per day. Obst and Brown (2000) reported an average wage of US $15 per hour for morel (*Morchella* spp.) harvesters in the Northwest Territories of Canada. Other authors have found that while such wages may be standard for experienced pickers, the majority of mushroom harvesters earn far less, and many, particularly those with little or no experience, lose money. Pickers are paid immediately in cash by mushroom buyers, who often handle tens of thousands of dollars each day in high-value, high-volume areas. Mushroom buying may represent the largest legal cash-based commerce in our society. Alexander et al. (2002a) explained how harvester wages for mushroom picking could be estimated. It is known locally, in many cases, what harvesters are paid for products they harvest from forests. However, assessing a wage from that data can be problematic. Harvester costs are generally unknown, and the harvesters’ personal minimum wage may vary from one market to
another, may vary from one season to another, and will vary as economic conditions change. There is also little published information about wages paid to harvesters of Christmas greens and floral products. Heckman (1951) reported daily wages of $18 to $40 for people who harvested floral greens in the Pacific Northwest in 1950, with a weekly maximum of $400. Floral greens, such as salal (Gaultheria shallon) are used all year round in the floral industry. It has been estimated that about 80 percent of evergreen boughs are used during the Christmas holidays. The remaining 20 percent are used year-round by the floral market.

Businesses in the nontimber forest products (NTFP) industry are generally small, employing few people. There are exceptions, but most businesses are what are referred to as very small enterprises, employing less than ten people. Many of these small businesses operate on the edge of the informal economy. Very small enterprises are relevant to informality for two important reasons. First, because of their low visibility, ease of displacement, and other small business/low capital investment characteristics, they provide the most appropriate setting for casual hiring, non-reported income, and other informal practices. The second point is that it is easier to operate a very small enterprise as a totally underground business. Fully informal small enterprises escape government record keeping. It is important to note that not all very small enterprises engage in informal practices (Alexander et al. 2002b). Workers in the informal economy tend to have very specific characteristics that can be referred to as downgraded labor. Many receive fewer benefits or lower wages, or experience worse working conditions than they would in the formal economy. Many work in the informal economy because they must.

Data reports in the 2003 National Report on Sustainable Forests (Alexander 2003) outlined numerous information needs for NTFP. There is a need to determine how to assess species inventory, monitoring, and harvests at local and regional levels. Managers and policy makers need to recognize that sustainability is both culturally and biophysically dependent. NTFP are a significant contributor to household economies and income, for which almost no data is collected.

Data on price, harvester costs, and sustainability has become a significant need. The United States Congress passed legislation in the 2000 Appropriations Act1, titled “Pilot Program of Charges and Fees for Harvest of Forest Botanical Products”, for the National Forest System. The legislation defines forest botanical products as “any naturally occurring mushrooms, fungi, flowers, seeds, roots, bark, leaves, and other vegetation (or portion thereof) that grow on National Forest System lands.” The legislation directs the Secretary of Agriculture to develop and implement a pilot program to charge for forest botanical products through the establishment of appraisal methods and bidding procedures. It requires analysis regarding the sustainability of harvest levels, and exempts personal use from fees. In addition, language in the 2000 Appropriations Act required that the fees collected from harvesters cover various agency administrative costs. In 2003,

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Section 339 was amended so fees are set by an appraisal process and designed so that at least a portion of fair market value and costs are recovered, and the authority for fee collection is extended to Sept. 30 2009.

A notice published in May 2004 in the Federal Register states “The Forest Service is promulgating regulations for managing special forest products and forest botanical products. The regulations will guide the Forest Service in the administration of the broader category of special forest products. The interim final rule also implements Public Law 106-113, which authorizes a pilot program of charges and fees for harvest of forest botanical products (Appropriations Act H.R. 3423, section 339, Forest Botanical Products). Forest Botanical Products include products, such as herbs, berries, seeds, and wildflowers that are not wood products. The intended effect of this rule is to give guidance and consistency for the sustainability and sale of special forest products including forest botanical products.”

The interim final rule will accomplish two things. The first is to provide guidance on the sale of special forest products and forest botanical products by the USDA Forest Service. The second is to establish fees to be collected for the harvest of forest botanical products. The interim final rule will be in effect when it is published. Comments will be taken and will be considered in the development of the final rule.

Draft regulations to implement the pilot program of charges and fees for harvest of forest botanical products on National Forest lands are currently in review. The Spring 2004 Federal Register states that an Interim Final Rule will be published in July 2004, with public comment to end in September 2004. However, the interim final rule was not published in July so the dates will be readjusted. When the interim final rule is published, the public will have 60 days to respond with comments.

Many other agencies have regulations and policies in place that address NTFP commercial harvest and transport. The USDI Bureau of Land Management has had an appraisal system in place for several years. There are numerous US State laws regarding transport of product on highways, and price and harvest on State lands. Many private landowners have policies governing commercial sales and public access for harvesting. NTFP policy, law, and regulation is becoming more complex, and understanding prices and labor structures will help policy and lawmakers to better understand the people and uses occurring on all land ownerships throughout North America.

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4 Andria Weeks, Personal communication, 8-20-04. Directives and Regulations Branch, Office of Regulatory and Management Services, Washington Office, USDA.


