



*Produced by the Non-timber Forest Products Program at Virginia Tech in collaboration with:
USDA Forest Service, Southern Research Station, SRS-4702, Blacksburg, Virginia;
Top of the Ozarks Resource Conservation & Development, Inc., Houston, Missouri; &
Missouri Department of Conservation, Jefferson City, Missouri.*

Gatherers, practices, and livelihood roles of non-timber forest products

Gathering plant material for food, medicine, and utilitarian items was the original relationship between human beings and forests. Even today, people throughout the world turn to forests and associated open lands to feed and heal themselves and find materials for things such as baskets and brooms. These activities provide valuable livelihood resources for gatherers as non-timber forest products (NTFPs) are consumed directly or exchanged both inside and outside formal markets. Contributions of NTFPs to livelihood are best documented in developing nations. However, they also are important to many people in developed nations. This fact sheet is based on research conducted in the Midwestern and Northeastern United States.



Who gathers non-timber forest products?

Gatherers are a diverse group, identifiable principally by their common interest in

harvesting NTFPs. They include women and men of all ages from different ethnic backgrounds in both rural and urban areas.



Jack and nephews

Jack and his wife run a wild edibles business from their homestead in rural Michigan. They do nearly all their own gathering, with seasonal help from family members and neighbors whom they have trained. Their business plan stresses a commitment to making a living off the woods in an ecologically sustainable manner. Jack has over 20 years of notes on weather, the location of edibles that they harvest year after year, and the condition of the forest around them.



Why do people gather NTFPs?

People gather NTFPs for a variety of reasons. The relative importance of values may change throughout an individual's lifetime, but often they are interrelated and complementary. Thus, gathering can be a way of:

Obtaining critical livelihood resources

Even in times and places of prosperity, many people are not doing well in the formal job market. This is particularly true of those whose formal employment opportunities are limited by age, gender, language skills, disabilities, or residence in rural or inner city areas. NTFPs are rarely a sole source of income but they provide critical supplements to other livelihood strategies. Gatherers obtain livelihood resources from NTFPs through both non-market and market activities. Non-market uses are mentioned most frequently. They include personal consumption, gift giving, and trade. Market uses encompass sale in a raw form and sale in a processed form, particularly as crafts. People gathering for sale in a raw form generally operate as independent contractors, a status they may value because it gives them maximum control over the amount and timing of their labor. Because gathering is hard, dirty work and gatherers rarely earn the equivalent of minimum wage, market uses tend to be displaced by formal employment opportunities.

Maintaining valuable skills, passing on important knowledge

Occasional gathering helps to maintain valuable skills even when subsistence values and/or cash income from NTFPs are not critical. For example, finding a good crop of berries requires familiarity with the changing patterns of open and closed land in a forested area. Active knowledge of how to harvest and handle materials for desired characteristics is critical to producing strong, beautiful baskets. Passing these skills on to younger family members ensures that gathering will be available to them; as a livelihood strategy should they ever need it.

Preserving cultural heritage

Particularly for Native Americans but for others as well, NTFPs are central to traditional practices. Sketaugen, the Ojibwa name for the tree fungus known in scientific nomenclature as *Inonotus obliquus*, provides a tinder medium for sacred fire. Cedar switches (*Thuja occidentalis*) are an important part of Finnish Americans' sauna rituals. Some cultural materials or acceptable substitutes are not available in the market economy. In addition, the process of gathering such items according to specified practices may be an important part of their value.

Marking the passage of the seasons

A meal that includes wild onions (*Allium tricoccum*; also called leeks or ramps), fiddleheads (*Matteuccia struthiopteris*), or dandelion greens (*Taraxacum spp.*) is a harbinger of spring. A mushroom hunt on a damp autumn day confirms the end of

summer and provides a rewarding excuse for the pleasure of a day in the woods. Many gatherers speak of the personal importance of maintaining their connection to the natural world and its cycles through their harvesting activities.



How do people gather NTFPs?

NTFP-based livelihood strategies are particularly valuable because they are flexible and can complement to other activities. The ways in which people gather influence their social and ecological sustainability through time.

Knowledge

Long-time gatherers often have remarkable knowledge of the woods they frequent and the NTFPs they harvest. Their knowledge is created through years of experience, sometimes supplemented by reading in formal scientific sources. They know where to look for the plants they use with respect to particular locations and the general ecological characteristics associated with them. Timing also is critical for some products and many gatherers are adept at reading signs that signal the best moment to harvest, such as weather conditions or the flowering of other plants.

Technology

Most NTFP harvesting is done by hand. When they are used, gathering tools generally are muscle powered and commonly available. Gatherers' processing, whether for personal consumption or sale,

also relies predominantly on personal labor and implements readily available in the home or community.

Gathering groups

While nearly everyone gathers alone occasionally, most gathering is done in groups of two or more. This tendency is not surprising since it is safer and more fun to gather with company. Gathering groups often include both males and females and multiple generations of the same family.



Jam Kitchen Sign

Aunt Jane grew up in the southeastern United States but married and moved to the northern Midwest. Living in an extremely rural area with an eighth grade education, there were not many formal employment opportunities open to her. But she was able to set up a jam and baking business in her home. With an investment of \$3,000 she equipped a kitchen to comply with Michigan Department of Agriculture requirements. She, her husband, and son pick a variety of wild berries within a 30 mile radius of their home. She uses the berries to make preserves and baked goods, which she sells to neighbors and at area fairs. Although the income is modest, she recuperated her full investment in the kitchen in less than three years. Aunt Jane's husband is employed seasonally as a construction worker. The money from her business is a source of pride for her and an important contribution to the family.

Such mixed groups ensure that the maximum number of people in a household know how to use NTFPs. There also is a special complementarity between the strength and vigor of youth and the knowledge and experience of age.



Mrs. Carrow & Son

At 60+ years of age, Mrs. Carrow has spent her entire life on a reservation. She and her husband worked many jobs over the years but, nevertheless, raised their 12 children on very little money. She relied on wild plants for supplemental food and medicine. Living on a fixed income, the money she now earns selling wild blueberries and making wreaths helps her buy Christmas and birthday presents for her many grandchildren. She has taught younger generations of her family to gather. Her son, a college graduate, has a good, steady job. However, he continues to gather occasionally to observe the passage of the seasons and enjoy the flavor of special foods.

Norms

Gatherers who rely on an NTFP for livelihood resources year after year and pass that activity on to younger people have a powerful incentive to observe rules or norms when harvesting. The nature of those norms varies from product to product depending on

such factors as the plant part being harvested and its reproductive characteristics. To be sure, not everyone who harvests NTFPs follows all of the rules all of the time. But conscientious gatherers often are as critical of folks who do not harvest “the right way,” as they are of forest-management practices that they believe damage the resource. Such gatherers are likely to:

- Minimize harvest volume and impacts
- Gather selectively
- Guard knowledge of a gathering site
- Maximize utilization of harvested materials
- Time gathering appropriately
- Rotate gathering
- Promote the growth of gathered species



Selected references

Arnold, J. E. Michael. 1995. Socio-economic Benefits and Issues in Non-wood Forest Products Use. In *Report of the International Expert Consultation on Non-Wood Forest Products*. Food and Agriculture Organization. Rome. Italy. Appendix 4.1.1.

Emery, Marla R. 1998. *Invisible Livelihoods: Non-Timber Forest Products in Michigan's Upper Peninsula*. UMI Dissertation Services. Ann Arbor, MI. <http://www.fs.fed.us/ne/burlington/nontimb>

Emery, Marla R. 1999. Social Values of Specialty Forest Products to Rural Communities. In *Proceedings of the North American Conference on Enterprise Development Through Agroforestry: Farming the Forest for Specialty Products*, edited by S. J. Josiah. University of Minnesota, Center for Integrated Natural Resources and Agricultural Management (CINRAM). Minneapolis, MN. pp. 25-32.

Falconer, Julia, and J. E. Michael Arnold. 1991. *Household Food Security and Forestry: An Analysis of Socio-economic Issues*. Food and Agriculture Organization. Rome. Italy.

Jahnige, Paul. 1999. Exploring Urban Non-Timber Forest Products: The Hidden

Nutritional, Economic, Cultural, and Educational Resources of the Urban Environment. Community Resources. Baltimore, MD. Available online at: <http://www.communityresources.org/ntfp.html>.

Authored by Marla R. Emery, Ph.D., USDA Forest Service, Northeastern Research Station Burlington, VT 05402-096

Photos by Marla R. Emery.

Layout, editing and production by Soumitri Das, Laura Shillington, and Tom Hammett at the College of Natural Resources, Virginia Tech, Blacksburg, Virginia.



This is part of a series of fact sheets on non-timber forest products. The full set of fact sheets is available at the Non-timber Forest Products website: <http://www.sfp.forprod.vt.edu/>

Please give us your comments on this fact sheet and suggestions for future fact sheets. Direct your comments to Tom Hammett, Department of Wood Science and Forest Products, 210 Cheatham Hall (0323), Virginia Tech, Blacksburg VA 24061. Phone: (540)-231-2716. E-mail: himal@vt.edu.

© January 2001

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).