

8.2 NONTIMBER FOREST PRODUCTS

BACKGROUND

Nontimber forest products (NTFPs) are part of a functioning ecosystem and may be vulnerable to overharvesting.

NTFPs are products from the forest that don't involve harvesting trees. They include nuts and seeds, berries, mushrooms, oils, foliage, and medicinal plants. People collect them for a variety of reasons. These activities connect people to the land, increase understanding of woodland ecology, and provide products for home use or for sale.

A complete list of all NTFPs is too lengthy for this chapter. About 2,000 plants grow in the state that have value as NTFPs, if not for home use or market potential, then for education and study. Table 1 lists examples of NTFPs found in New Hampshire.

OBJECTIVE

To increase knowledge and awareness of nontimber forest products and avoid overharvesting.

CONSIDERATIONS

- It is unlawful to collect plants protected under the Native Plant Protection Act of 1987 without landowner permission. However, “Nothing in this section shall limit the rights of private property owners to take protected species on their own lands” (RSA 217-A).
- A permit is required to remove plants or other types of forest products from the White Mountain National Forest.
- Rules relating to all state-owned parks and to N.H. Dept. of Resources and Economic Development (DRED) properties state that “No person shall remove or damage any structure, plant, marine life, or natural feature on DRED properties.” (N.H. Administrative Rules Res 7301.05).
- More research is needed to determine strategies for sustainable management of NTFPs.
- Accurate identification is essential to prevent poisoning from wild plants and mushrooms and to prevent picking of threatened and endangered species or plants of special concern. Any harvesting of these species, such as American ginseng, is unsustainable.
- Removing whole plants without consideration for regeneration isn't sustainable.
- Different habitats support different NTFPs. Riparian areas and other forest wetlands typically provide habitat for a large number of plants. Fields, meadows, and other open spaces within or adjacent to woodlands are also important for sun-loving NTFPs, e.g., edible wild greens.
- Many children don't spend enough time outdoors to appreciate the abundant values offered in nature. The hands-on, mostly outdoors study of NTFPs would benefit our children.
- For business enterprises:
 - Adding value beyond collecting to some NTFPs increases income. Examples include balsam fir branches made into wreaths, mushrooms dried to concentrate their flavor, and wildflowers pressed and applied to lampshades.
 - Locating markets, no matter how small, increases income. Direct marketing, where products are sold directly to the consumer (e.g., farmers markets), is usually the most profitable for NTFP entrepreneurs and is often the most appropriate option for small-scale NTFP businesses. Wholesale marketing involves a broker, who then sells to the customer. Niche markets are small specialty markets. Drying mushrooms to enhance flavor is an example of a niche market.

Table 1. Examples of Nontimber Forest Products

NTFP	Uses	Examples of Species in NH Forests
bark	<ul style="list-style-type: none"> • medicinal extractions • baskets 	<ul style="list-style-type: none"> • slippery elm (<i>Ulmus rubra</i>) • birch (<i>Betula spp.</i>) • black ash (wood strips)
berries and wild fruit	<ul style="list-style-type: none"> • wine • jams and preserves • sauces • cider 	<ul style="list-style-type: none"> • apples (<i>Malus spp.</i>) • wild blackberry (<i>Rubus spp.</i>) • blueberry (<i>Vaccinium spp.</i>) • red and black raspberry (<i>Rubus spp.</i>) • currants and gooseberries (<i>Ribes spp.</i>)
cones and seeds	<ul style="list-style-type: none"> • floral and wreath arrangements • fire starters • wildflower seed mixes 	<ul style="list-style-type: none"> • white pine (<i>Pinus strobus</i>) • red spruce (<i>Picea rubens</i>) • balsam fir (<i>Abies balsamea</i>) • eastern hemlock (<i>Tsuga canadensis</i>) • switchgrass (<i>Panicum virgatum</i>) • creeping red fescue (<i>Festuca rubra</i>)
forest botanicals	<ul style="list-style-type: none"> • herbs and spices • edible greens, roots or tubers • medicinal plants 	<ul style="list-style-type: none"> • red raspberry leaves • rose hips (<i>Rosa spp.</i>) • dandelion (<i>Taraxacum officinale</i>)
greenery, transplants, and floral products	<ul style="list-style-type: none"> • decoration • crafts • landscaping 	<ul style="list-style-type: none"> • balsam fir (<i>Abies balsamea</i>) • winterberry holly (<i>Ilex verticillata</i>) • grape (<i>Vitis spp.</i>) • dogwoods (<i>Cornus spp.</i>) • cinnamon fern (<i>Osmunda cinnamomea</i>) • various wildflowers
honey	<ul style="list-style-type: none"> • food 	<ul style="list-style-type: none"> • blackberries and raspberries (<i>Rubus spp.</i>) • blueberries (<i>Vaccinium spp.</i>) • American basswood (<i>Tilia americana</i>) • black locust (<i>Robinia pseudoacacia</i>) • asters (<i>Aster spp.</i>) • goldenrod (<i>Solidago spp.</i>) • clover (<i>Melilotus spp.</i>) • red maple (<i>Acer rubrum</i>)
mushrooms	<ul style="list-style-type: none"> • food • medicine 	<ul style="list-style-type: none"> • black trumpet (<i>Craterellus fallax</i>) • chantarelle (<i>Cantharellus cibarius</i>) • hen of the woods (<i>Grifolia frondosa</i>) • oyster mushroom (<i>Pleurotus ostreatus</i>) • shiitakes (<i>Lentinus edodes</i>) • birch conk (<i>Piptoporus betulinus</i>) • chaga (<i>Inonotus obliquus</i>) • tinder conk (<i>Fomes fomentarius</i>)
nuts	<ul style="list-style-type: none"> • food 	<ul style="list-style-type: none"> • shagbark hickory (<i>Carya ovata</i>) • hazelnuts (<i>Corylus americana</i> and <i>C. cornuta</i>) • beechnut (<i>Fagus grandiflora</i>) • butternut (<i>Juglans cinerea</i>) • black walnuts (<i>Juglans nigra</i>)
spruce gum	<ul style="list-style-type: none"> • medicine • gum • patching birch bark canoes 	<ul style="list-style-type: none"> • red, white and black spruce (<i>Picea rubens</i>, <i>P. glauca</i>, <i>P. mariana</i>)

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RECOMMENDED PRACTICES

- ✓ Don't harvest threatened or endangered species or species of concern.
- ✓ To maintain sustainable populations of NTFPs:
 - Collect only moderate quantities.
 - Gather from a large group, rather than a small group with a few individuals.
 - Understand the growth and regeneration habits of the specific plants and use collection techniques that maintain healthy populations. Taking just leaves, tender tips, and stems may encourage growth.
 - Learn plant parts at all stages of development during different seasons to be sure you know what you are harvesting.
- ✓ Consult authoritative field guides and experts before harvesting plants for food or medicine, as some edible plants closely resemble their highly toxic relatives.
- ✓ Coordinate with timber harvesting and tending activities to help the sustainable flow of all forest products including NTFPs. Mapping locations of NTFPs prior to harvesting and then taking care of those sites will help provide high-quality NTFPs. For example, white birch trees could be located, and their birch bark removed prior to timber harvesting.
- ✓ Whether you are interested in casual collecting or starting a small business, inventory the natural resources on your land, including NTFPs. This will help determine whether an NTFP enterprise is viable, given the availability and sustainability of the resource. Understanding what you have is the best way to make sustainable choices about collection.

CROSS REFERENCES

1.2 Setting Objectives; 2.1 New Hampshire Forest Types; 2.2 Forest Structure; 4.2 Wetlands; 4.3 Forest Management in Riparian Areas; 6.5 Permanent Openings; 6.6 Temporary Openings Created by Forest Management.

ADDITIONAL INFORMATION

Cercone, M., and W. D. Lilley. *Balsam Fir Tip Gathering*. *Bulletin #7011*. University of Maine Cooperative Extension. <http://www.umext.maine.edu/onlinepubs/htmpubs/7011.htm> Accessed March 9, 2010.

Kays, J., and J. Drohan. 2004. *Forest Landowner's Guide to Evaluating and Choosing a Natural Resource-Based Enterprise*. NRAES-151. NRAES Cooperative Extension. 102 p.

Lilley W. D., and V. J. Holmes. *Growing a Continuous Supply of Balsam Fir Wreath Brush*. *Bulletin # 7089*. University of Maine Cooperative Extension. <http://www.umext.maine.edu/onlinepubs/htmpubs/7089.htm> Accessed March 9, 2010.

Louv, R. 2005. *Last Child in the Woods: Saving Our Children From Nature-Deficit Disorder*. Algonquin Books of Chapel Hill, Chapel Hill, N.C. 336 p.

Monthey, R., and E. and A. Angevine. *Integrating Production of Non-timber Forest Products with Timber Management*. USDA For. Serv. NA—State & Private Forestry. http://www.na.fs.fed.us/stewardship/pubs/docs/080915_non%20timber%20article.pdf Accessed March 9, 2010.

RSA 217-A. 1987. *New Hampshire Native Plant Protection Act*. <http://www.gencourt.state.nh.us/rsa/html/XIX/217-A/217-A-mrg.htm> Accessed May 27, 2010.

Seymour, T. 2002. *Foraging New England: Finding, Identifying, and Preparing Edible Wild Foods and Medicinal Plants from Maine to Connecticut*. The Globe Pequot Press, Guilford, Conn. 208 p.

Reichenbach, M., J. Krantz, and K. Preece. *Non-timber Forest Products and Implications for Forest Managers*. <http://www.extension.umn.edu/specializations/environment/ntfp.html#> Accessed June 9, 2010.