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### ALTERNATIVE FOREST PRODUCTS TO CONSIDER

*Maple Syrup*

*Wild and Cultivated  
Mushrooms*

*Witch Hazel*

*Ginseng*

*Floral Greenery*

*Specialty Wood Products*

*Recreation*

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## Working For Alternative Forest Products

While approximately 60% of Rhode Island is forested, this valuable resource is being lost and fragmented by intense development pressure. Due to the small size, low productivity, and short ownership tenure of many forested parcels in Rhode Island, the production of traditional wood products (logs, firewood, pulp, etc.) is often not feasible. Many groups and agencies within Rhode Island have begun to tackle this tough issue by encouraging landowners to adopt innovative forest-based business activities. Managing for alternative forest products may provide landowners with ways to generate income—at least enough to pay property taxes, and it may have the potential to develop into a small business. This may also provide additional incentives and opportunities for large acreage landowners to retain their land. The development of alternative forest products is one proactive approach that compliments many other statewide programs, which promote the sustainability, viability, conservation, and preservation of rural lands. At the least, these suggested products might provide you with personal satisfaction and enjoyment, which include medicinal and edible products, floral greens, specialty wood products, and recreation.

### Where do I begin?

As with traditional timber production, producing alternative forest products requires time, research, and preparation. The first and most important step is to complete a thorough inventory of your property to determine what resources and features your land has and which products will be the most suitable to your site. You may wish to enlist the help of a consulting forester or other natural resource professional (contact RI DEM Division of Forest Environment to talk with a service forester and obtain a list of Consulting Foresters). For example, a property with an existing stand of

sugar and red maple trees will be much more suited to maple syrup production than a dry, sandy site predominated by pitch pine and oak trees, which may be more suited to producing floral greens, pine cones and other decorative products. The types of trees and other vegetation growing in your woods serve as an indicator of the type of soil conditions and sunlight availability that exists. Refer to the attached *Woodland Area Inventory Sheet* and factsheet *Where Do I Begin? A Forest Is More Than a Bunch of Trees* to review your property features and characteristics.

With certain options in mind, you then need to thoroughly research the specifics for producing each product. These specifics include:

- Identify land conditions, resources, start-up costs and other issues necessary to produce the product (for example, it can take 40 to 60 years for a maple tree to achieve a tapable size, depending on the overall site quality).
- Identify the amount of product you need to produce to make the venture feasible, practical and profitable.
- Determine whether you want to produce the product for you and your family or to sell for added income. If you plan to sell, identify markets and means of distribution.
- Identify any other special considerations such as a legal or liability issues.

### What are some alternative forest products that I should consider?

The Rhode Island Rural Lands Coalition and the Rhode Island Department of Environmental Management (RI DEM) have identified alternative forest products suitable for Rhode Island. Their findings are summarized below. Contact the RI DEM Division of Forest Environment and the Sustainable Watersheds Office or see the Alternative Forest Products website

[www.state.ri.us/dem/programs/bpoladm/stratpp/forprod/forstprd.htm](http://www.state.ri.us/dem/programs/bpoladm/stratpp/forprod/forstprd.htm), for more detailed information about each of these products, including brochures with a list of additional resources. A factsheet on site assessment is also available through the sustainable watersheds office, (401) 222-3434.

Use the *Record of Woodland Area Plans and Activities* sheet to record actions you plan to take and develop a time frame for accomplishing activities.

### Maple Syrup

Maple syrup production is a North American tradition started by the Native Americans who passed it on to the European settlers. Today, forest owners with older maple trees can produce maple products for their own use or for added income.

#### Things to keep in mind:

- It takes 40 gallons of sap to make 1 gallon of syrup.
- Sugar Maples are the best trees to use, providing the highest quality syrup.
- Depending on your production level, costs will include equipment, the sugarhouse, management costs, labor, fuel, electricity, packaging, and maintenance.
- Another option is to rent your trees to another producer.

#### For additional information:

Cornell University's Sugar Maple Research and Extension Program, (607) 255-2115  
<http://maple.dnr.cornell.edu/>

### Wild and Cultivated Mushrooms

With an increased interest in natural food products and gourmet and ethnic cuisine, gathering or cultivating mushrooms can be both satisfying and fun. Certain cultivated mushrooms such as shiitake and oyster mushrooms can be sold on a commercial basis.

#### Things to keep in mind:

- Many mushrooms are poisonous. The key to safety is to become thoroughly familiar with mushroom gathering techniques and mushroom species identification. Take a pictorial guidebook with you. Or take a person along who is experienced with mushroom identification.
- Wild edible mushrooms that are typically found in Rhode Island are Chicken of the Woods and Honey Mushrooms.

#### For additional information:

*Growing Mushrooms Commercially – Risks and Opportunities*. This is a publication by the University of Idaho College of Agriculture that is accessible on-line. <http://info.ag.uidaho.edu/pdf/CIS/CIS1077.pdf>

Penn State Specialty Mushrooms webpage [www.cas.psu.edu/docs/CASDEPT/PLANT/ext/mushroom.html](http://www.cas.psu.edu/docs/CASDEPT/PLANT/ext/mushroom.html)

*National Audubon Society Field Guide to North American Mushrooms*, Alfred A. Knopf. 1977-on.

The University of Ohio Cooperative Extension has put out a series of fact-sheets relating to the production of Shiitake mushrooms including:

- How to purchase spawn
- Log laying
- Economic Considerations

<http://ohioline.osu.edu/for-fact/index.html>

### Witch Hazel

Witch hazel (*Hamamelis virginiana*) is a medicinal shrub native to the eastern United States. The Native Americans used it to combat a variety of ailments, minor wounds, and abrasions. Today, the astringent is still found in a wide variety of health and beauty products.

#### Things to keep in mind:

- It is a slow growing shrub that is shade tolerant and grows in hardwood forests on moist, fertile soil.
- Witch hazel can grow 8 - 20 feet tall.
- It may only be feasible for you to pursue witch hazel production if you have existing mature shrubs on your property. It takes a long time for witch hazel to mature to harvesting age.

### Ginseng

The Chinese have used Asian ginseng for medicinal purposes for over 4000 years. Because of its popularity, its supply has been depleted in Asia. American ginseng (*Panax quinquefolium*) is native to many eastern states. The root is the most sought after part and has been collected for export to Asia since early in the 18th century. Unfortunately, American ginseng has been over-harvested as well. Ginseng is listed on CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora, [www.cites.org](http://www.cites.org)). People now either culti-

## WHERE DO I TURN FOR & HELP?

### RI DEM Division of Forest Environment

(401) 647-3367  
[www.dem.ri.gov](http://www.dem.ri.gov) – links to Alternative Forest Products Website

- To talk with a state service forester.
- Obtain assistance with the development and production of alternative forest products; list of consulting foresters and licensed wood operators.

### RI DEM Sustainable Watersheds Office

(401) 222-3434  
[www.dem.ri.gov](http://www.dem.ri.gov)

- Factsheets on site assessment and alternative forest products.

### Rhode Island Forest Conservators Organization (RIFCO)

(401) 568-3421  
[www.rifco.org](http://www.rifco.org)

- Educational programs and events, newsletter, Rhode Island Tree Farm Program, links to numerous publications and local, state, and federal forestry agencies and organizations.

### RI DEM Division of Fish and Wildlife

(401) 789-3094  
[www.dem.ri.gov](http://www.dem.ri.gov)

- Information on hunting rules, regulations and safety education training
- To talk with a state wildlife biologist

MORE INFORMATION

**Cornell Cooperative Extension, Department of Natural Resources**  
(607) 255-2115

*Agroforestry Learning Communities in the Northeast*  
[www.dnr.cornell.edu/ext/agroforestry/sare](http://www.dnr.cornell.edu/ext/agroforestry/sare)  
Publications: [www.dnr.cornell.edu/ext/ext/publications.htm](http://www.dnr.cornell.edu/ext/ext/publications.htm)

**USDA Forest Service, Northeastern Area, State and Private Forestry**

[www.na.fs.fed.us](http://www.na.fs.fed.us)  
Links to Durham, NH Field Office  
(603) 868-7600  
[www.fs.fed.us/na/durham](http://www.fs.fed.us/na/durham)

➤ *Information on Urban & Community Forestry; Forest Products Publications; Wildlife; on-line Library.*  
Agro Forestry Links:  
[www.na.fs.fed.us/spfo/links/agrofor.htm](http://www.na.fs.fed.us/spfo/links/agrofor.htm)

**A Forest Landowner's Guide to Internet Resources: States of the Northeast**  
[www.na.fs.fed.us/pubs/misc/ir/index.htm](http://www.na.fs.fed.us/pubs/misc/ir/index.htm)

➤ *Publications and fact-sheets for: Specialty Forest Products; Recreation; Wildlife/Hunting; Economics of Forest Investments.*

vate ginseng or grow wild-simulated ginseng to export to Asia.

**Things to keep in mind:**

- American Ginseng that is found growing naturally wild in Rhode Island is rare and should not be collected or disturbed in any way.
- Ginseng grows best in areas with 80% shade cover, moist, well-drained soils, average air temperature of 50°F, and average annual rainfall of 40-50". Ginseng has specific soil requirements in order to grow. The additional information below as well as the resources listed on the RI DEM web page will provide you with more information. Have your soil tested before planting to make sure your site is suitable.
- Cultivated ginseng can generally be harvested 3-5 years after planting. Wild simulated ginseng is ready to harvest 9-12 years after planting.

**For Additional information:**

Ginseng, description of the plant from *The Herb Hunters Guide American Medicinal Plants Of Commercial Importance*, Sievers, A.F., USDA Miscellaneous Publication No. 77, Washington, D.C., July 1930, available on-line at [www.hort.purdue.edu/newcrop/herbhunters/ginseng.html](http://www.hort.purdue.edu/newcrop/herbhunters/ginseng.html)

*Economics and Marketing of Ginseng* Agroforestry Notes, AF Note - 15, July 1999, USDA Forest Service and USDA Natural Resources Conservation Service, available on-line [www.unl.edu/nac/afnotes/ff-4/ff-4.pdf](http://www.unl.edu/nac/afnotes/ff-4/ff-4.pdf)

*Producing and Marketing Wild Simulated Ginseng in Forest and Agroforestry Systems* Virginia Cooperative Extension, Publication Number 354-312, covers:

- The steps for growing both cultivated and wild-simulated ginseng
- Marketing ginseng
- Economics of growing ginseng available on-line at [www.ext.vt.edu/pubs/forestry/354-312/354-312.html](http://www.ext.vt.edu/pubs/forestry/354-312/354-312.html)

Ginseng, section from the *Alternative Field Crops Manual*, University of Wisconsin & University of Minnesota. It gives a detailed description of the steps required for growing cultivated ginseng, available on-line at [www.hort.purdue.edu/newcrop/afcm/ginseng.html](http://www.hort.purdue.edu/newcrop/afcm/ginseng.html)

**Floral Greenery**

Many people enjoy having floral arrangements as centerpieces in their home and at a variety of gatherings such as weddings and other parties. Many also enjoy hanging holiday wreaths, as well as adorning the home with a variety of floral decorations year-round. With the right type of tree and shrub species you can supply these decorative products.

**Things to keep in mind:**

- Commonly harvested floral products include pine cones, boughs from cedar, pine, spruce, fir and hemlock, branches from alder, birch and ironwood, mountain laurel, holly, ferns, dogwood, grape vines, sumac, cattails, club moss, white birch bark, winterberry, and pussy willows. Be aware of invasive plants and do not plant them in your woodlands. Refer to factsheet *Working for Biodiversity and Protection from Invasive Species* for more information.
- Product freshness is key.
- A wide variety of craft stores, wholesalers, and florists could be interested in what is growing in your woodlands.

**For additional information:**

Chapter 9 - Greenery, Transplants, and Floral Products. Margaret G. Thomas and David R. Schumann. 1993. *Income Opportunities in Special Forest Products--Self-Help Suggestions for Rural Entrepreneurs*. Agriculture Information Bulletin AIB-666, U.S. Department of Agriculture, Washington, DC. This chapter will give a basic idea of what types of floral greenery are good for commercial markets, marketing techniques and considerations, and buyer's prices. Available on-line [www.fpl.fs.fed.us/documnts/usda/agib666/aib66609.pdf](http://www.fpl.fs.fed.us/documnts/usda/agib666/aib66609.pdf)

### MAPLE SYRUP

*It takes 40 gallons of sap to make 1 gallon of syrup.*

### WILD & CULTIVATED MUSHROOMS

*Wild edible mushrooms that are typically found in Rhode Island are Chicken of the Woods and Honey Mushrooms.*

### WITCH HAZEL

*The Native Americans used it to combat a variety of ailments, minor wounds, and abrasions.*

### GINSENG

*American Ginseng that is found growing naturally wild in Rhode Island is rare and should not be collected or disturbed in any way.*

### FLORAL GREENERY

*A wide variety of craft stores, wholesalers, and florists could be interested in what is growing in your woodlands.*

### SPECIALTY WOOD PRODUCTS

*These types of products are gaining popularity with the people who desire an environmentally friendly lifestyle or natural and rustic products that signify a local area.*

### RECREATION

*Due to overcrowding at popular public parks, and an overall dwindling of natural areas, people are looking to private lands to fulfill their outdoor activities.*

Programs and activities are available to all persons without regard to race, color, sex, disability, religion, age, sexual orientation, or national origin.

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### Specialty Wood Products

Specialty wood products include the widest variety of products. They are products made from either the whole tree or various parts. These types of products are gaining popularity with the people who desire an environmentally friendly lifestyle or natural and rustic products that signify a local area.

#### Things to keep in mind:

- Specialty wood products include baskets, barrels, buckets, bowls, butcher blocks, trays, rustic furniture, frames, games, handles, lamps, planters, novelties, toys, walking sticks, dishes, decoys, craft wood, trellises, and whatever else the imagination can come up with.
- These products are especially popular with seasonal visitors as they can take a piece of local "flavor" home with them.
- If you plan on clearing brush and debris from your woodlands, an option might be to locate a craftsman or gift and craft stores that would be interested in using these raw materials.

#### For additional information:

Chapter 16 – Specialty Wood Products. Margaret G. Thomas and David R. Schumann. 1993. *Income Opportunities in Special Forest Products--Self-Help Suggestions for Rural Entrepreneurs*. Agriculture Information Bulletin AIB-666, U.S. Department of Agriculture, Washington, DC. This chapter describes types of specialty wood products and their marketing considerations, available on-line [www.fpl.fs.fed.us/documnts/usda/agib666/aib66616.pdf](http://www.fpl.fs.fed.us/documnts/usda/agib666/aib66616.pdf)

### Recreation

Due to overcrowding at popular public parks, and an overall dwindling of natural areas, people are looking to private lands to fulfill their outdoor activities. Fee-for-use and property leasing are ways to earn income by charging people for access to your property for various recreational purposes. You can lease your property to an individual or an organization and allow them a previously agreed upon type of access to your property. With Fee-for-use, you can set up your property to be used for specific purposes and then charge people for access.

#### Things to keep in mind:

- These outdoor activities include skiing, hiking, biking, hunting, fishing, snowmobiling, horseback riding, and viewing scenic beauty and wildlife.
- There are legal matters that you will need to address with the public use of your private lands for a fee. Consult a lawyer, discuss your responsibilities, and draw up any necessary legal documents and paperwork.
- You may need to create a trail system on your property and maintain it regularly.

You can also refer to factsheet *Working for Recreation and Aesthetics* for more information and ideas relating to this topic.

#### For additional information:

*TITLE 2 Parks and Recreational Areas CHAPTER 32-6 Public Use of Private Lands – Liability Limitations SECTION 32-6-3*  
This is a Rhode Island State Law regarding the liability of a landowner that allows people to use his/her property for recreational use, [www.rilin.state.ri.us/Statutes/TITLE32/32-6/32-6-3.htm](http://www.rilin.state.ri.us/Statutes/TITLE32/32-6/32-6-3.htm)

*TITLE 2 Parks and Recreational Areas CHAPTER 32-6 Public Use of Private Lands – Liability Limitations SECTION 32-6-5*  
This section covers the exceptions to SECTION 32-6-3, [www.rilin.state.ri.us/Statutes/TITLE32/32-6/36-6-5.htm](http://www.rilin.state.ri.us/Statutes/TITLE32/32-6/36-6-5.htm)

David M. Rathke and Melvin J. Baughman, Minnesota Extension Service, University of Minnesota *Recreational Trail Design and Construction*. This publication gives detailed step-by-step instructions and tips for the design and construction of various trails. It also describes types of hazards and obstacles that will require maintenance during and after trail construction and how to handle them, [www.extension.umn.edu/distribution/naturalresources/DD6371.html](http://www.extension.umn.edu/distribution/naturalresources/DD6371.html)

#### Hunting Leases and Permits

This is an Alabama Cooperative Extension System publication. It was designed to make people aware of leases for recreational purposes and the need for proper legal advice. [www.aces.edu/departments/extcomm/publications/anr/ANR-0541/anr541main.html](http://www.aces.edu/departments/extcomm/publications/anr/ANR-0541/anr541main.html)