

Forest Farming in North America

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What is forest farming?

Forest farming is the cultivation of understory crops within an established forest. It is a form of forest land management system known as agroforestry. It may take place in a natural forest or in a timber planting. Forest farming can be a sustainable production system which helps keep a forest healthy by introducing more biodiversity. Forest farming does not generally refer to the trees that may be grown for pulp or timber, only to the crops grown amongst the trees.

What are some of the crops that can be grown?

Almost any plant or fungus that needs shade can be grown in a forest farming system. The most common crops are medicinal herbs and mushrooms. Other crops that can be produced include shade loving native ornamentals, moss, fruit, nuts, other food crops, and decorative materials for crafts. These crops are often referred to as special forest products. Here are some specific examples of crops in each category that are currently being cultivated:

- Medicinal herbs: Ginseng, goldenseal, black cohosh, bloodroot, passionflower, and mayapple.
- Mushrooms: Shiitake and oyster mushrooms.
- Native ornamentals: Rhododendrons and dogwood.
- Moss: Log or sheet moss
- Fruit: Pawpaws, currants, elderberries, and lowbush blueberries.
- Nuts: Black walnuts, hazelnuts, hickory nuts, and beechnuts.
- Other food crops: Ramps (wild leeks), maple syrup, and honey.
- Plants used for decorative purposes, dyes, and crafts: Galax, princess pine, white oak, pussy willow branches in the spring, holly, bittersweet, and bloodroot.

What are the economics of forest farming?

Most forest farming operations are very small in scale and provide supplemental income to a family or company. Returns per acre vary widely from farm to farm because everyone grows these plants a little differently. Examples of enterprise budgets generated through commercial and university studies in North America project the following net profits:

- Wild simulated ginseng: \$20,460 US per half-acre after nine years.
- Woods-cultivated ginseng: \$5,865 US per half-acre after six years.
- Organic, forest grown goldenseal: \$2,490 US per one-tenth acre after four years.
- Wild-simulated goldenseal: \$10,100 US per half-acre after five years.
- Woods grown ramps: \$770 US per one-tenth acre after three years.

How do I sell my forest crops?

As with any crop, you should know and develop your market before you plant. Selling forest crops can be difficult if you don't know how the market system works. This is not a well-organized or publicized industry and much of it operates "behind the scenes". As a result, there aren't many comprehensive directories of forest product buyers. In some states, the cooperative extension service, department of agriculture, or forest service maintain a list of ginseng dealers and other buyers of forest products. These can often be found on-line. In most areas, you really need to know someone in the industry to get started. The Internet, however, provides a new market opportunity for buyers and sellers of forest crops.

Are there value-added products that I can make?

Making your own value-added products can greatly increase the profitability of forest farming. For example, creating wreaths and garlands from forest greenery and vines and selling them directly to the consumer can increase the value of the greenery 20 times or more. White oak baskets, herb extracts, herbal teas, beeswax candles are other products you can make and sell. You can also run a native plant nursery and sell seeds and planting stock.

Who is the competition?

Competition for forest farming comes from wild-harvesters. Before any forest farming is attempted, it is important to study the market and determine why a cultivated product would be more desirable to a buyer than a wild-harvested product. Wild harvesters have several advantages over the farmer. They do not have to own land, they don't have any investment in the crop, and they can harvest just what is in demand at the time. Advantages forest farmers have over wild harvesters is that they can produce large volumes of the product that is in demand, their product will be more uniform, and they can provide quality control.

Where can I get more information on forest farming?

The Virginia Tech University Department of Wood Science and Forest Products:

http://www.sfp.forprod.vt.edu/special_fp.htm

The Cornell Cooperative Extension Service South Central New York Agriculture Team:

<http://scnyat.cce.cornell.edu/forestfarming/markets.htm>

Association for Temperate Agroforestry:

<http://www.aftaweb.org/entserv1.php?page=3#potential>

The Institute for Culture and Ecology: <http://www.ifcae.org/ntfp/>

University of Minnesota:

<http://www.extension.umn.edu/specializations/environment/ntfp.html>

USDA National Agroforestry Center: <http://www.unl.edu/nac/publications.htm>

North Carolina State University: <http://ncherb.org>

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