

Do You Have Problems With:

- Lack of short-term income from land dedicated to long-term timber production or woodland
- Lack of diversity of marketable crops or products harvested from your land
- Taking advantage of non-traditional or high-value specialty markets

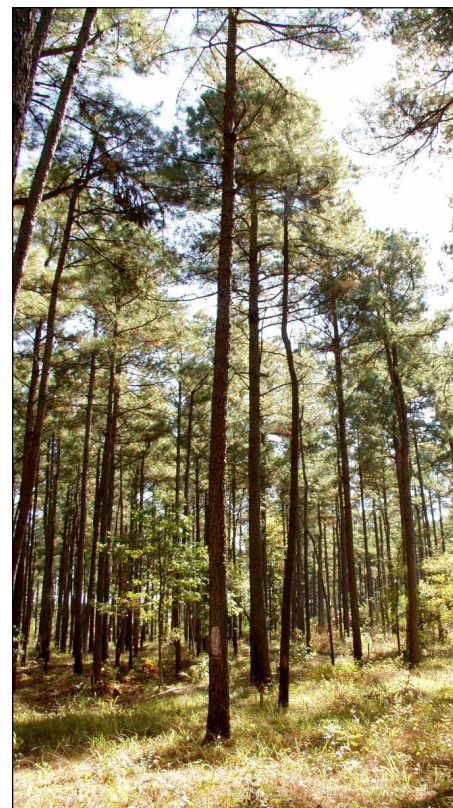
Forest Farming Can Help

Benefits and Purposes of Forest Farming:

- Provides farm income while trees are being grown for wood production
- Diversifies sources of farm income with non-timber forest products on land dedicated to timber production or woodland
- Provides a regular supply of food, medicinal plants, ornamentals, and other non-timber products, while improving timber stands and forest health
- Improves plant diversity by growing crops having different growing seasons, heights and forms on the same area
- Decreases pressure on over-harvested naturally occurring non-timber forest products
- Allows production of plants that may be protected from natural harvest



Photo: Chris Evans, University of Georgia, www.forestryimages.com



The long-term income from land planted for timber or wood production is often meant for retirement purposes or inheritance for children and grandchildren.

Forest Farming and growing forest understory crops can supplement your short-term income and add diversity to your operation.

Photo: Arkansas Agricultural Experiment Stations

Planted Production Compared to Harvest of Naturally Occurring Plants:

People harvest mushrooms, herbs, vines, flowers, and a variety of other things from the forest for food, medicines, construction materials, and crafts. In some cases, over-harvest has resulted in damage to natural sources. Forest Farming systems have been developed to produce the same types of plants or products under a managed environment to prevent over-harvest and to help people make the most of their timber and woodland acreage.

Forest Farming

Forest Understory Crops—are shade tolerant plants that live in the forest or in association with trees.

Types of Forest Understory Crops:

These crops fall into four general categories:

- Foods—such as fruits, nuts, berries, greens, and mushrooms
- Medicines & Herbal Supplements—such as ginseng, echinacea, goldenseal, black cohosh, and witch hazel
- Decorative Products—such as flowers, Spanish moss, vines, stems, seedheads, leaves, and fruiting structures used in floral arrangements
- Handicrafts and Specialty Woods—such as grape vines and branches



Ramps, or wild leeks, (above) grow in moist soil in hardwood forests as far north as Canada and as far south as North Carolina.

Establishment Considerations:

Many of the plant species grown in Forest Farming operations can demand a very high price. However, seeds/roots to establish these plants might also be expensive to obtain and some species require a number of years before the first harvest can be made. Before investing time and money into growing a particular forest understory crop, consider the following:

- Locate a source of technical expertise to assist you
- Obtain production and processing information
- Locate or develop potential markets



Shiitake mushrooms (below) grow on hardwood logs, such as red and white oak, in a warm, moist environment.

Cost to Implement:

The cost of installing this type of operation will be specific to your land depending on the amount of tree thinning needed to achieve the desired amount of shade, and the underbrush thinning and pruning required to make room for the forest understory crop. Additional costs depend on the amount of site preparation needed and the cost to establish the desired crop. An alternative to Forest Farming and planted forest understory crops is the selective harvest of naturally occurring plants or plant parts that might already be growing in your woods. This is called “wildcrafting”. Over-harvesting must be avoided to maintain an adequate supply for continued harvest.

Forest Farming

How to Install this Practice:

Forest Farming systems are usually established by selectively thinning existing forest or timber stands to leave the best trees for continued wood production, while allowing enough sunlight for the forest understory crop to grow. The forest understory crop is then established and managed according to its needs.

As the forest understory crop grows and the trees continue to mature, the amount of light reaching the forest floor can be managed, as needed, with additional thinning, pruning, or even addition of trees. Species diversity, including use of natives, should be considered to avoid losses due to species-specific pests and to enhance wildlife habitat.



Forest Farming includes the encouragement or production of nuts, berries and fruits that occur naturally in forests. Pawpaw (flower and fruit below), serviceberry, and blackberry are examples of forest understory plants that can be managed for increased production.



Ginseng (above) root is a high-value product. American ginseng grows on shady, moist, and well-drained sites. North and east facing slopes are most commonly associated with good growing locations. Yellow poplar is a good indicator of a suitable site for growing ginseng.



Goldenseal (left) often grows in association with American Ginseng, but has a lower market value.

Natural stands of ginseng and goldenseal are threatened by over-harvest.

Forest Farming is a good option for growing and supplying these crops.

Photo above: Pawpaw flower, Wendy VanDyk Evans, University of Georgia; Photo below: Pawpaw fruit, Brian Lockhart, USDA Forest Service; www.forestryimages.com

Marketing Considerations:

Producers must be sure there are adequate markets for selling their products before entering into these new production systems. Many of the common products, such as fruits, nuts, berries, greens, and mushrooms can be marketed to local grocery stores, restaurants or at roadside stands. Other specialty products, such as ginseng and herbal supplements will require finding buyers who may or may not be local.

SMALL SCALE SOLUTIONS FOR YOUR FARM

Technical Help Is Available

Your local Natural Resources Conservation Service (NRCS) office has experienced conservationists that can assist you with forest farming. They can also help you develop a Conservation Plan to solve other problems you have identified on your farm.

There is no charge for our assistance. Simply call your local office at the number listed below to set up an appointment and we will come to your farm.

You may also be eligible to receive financial assistance, through a state or federal program. Your NRCS office will explain any programs that are available so you can make the best decision for your operation. All NRCS programs and services are voluntary.



Helping People Help the Land

For More Information Contact the:

Natural Resources Conservation Service

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