

WHAT IS FOREST FARMING?



Forest-grown goldenseal (left, photo credit: Raelin Kronenberg)

and shiitake mushroom logs resting in the wooded shade (right, photo credit: Center for Agroforestry).



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Forest farming is the intentional management of an established or developing forest to support the growth of understory specialty crops (Trozzo et al., 2021). These understory crops, most can include grasses, herbs or botanicals, woody plants, fungi, vines, lichen, and mosses (Jones & Lynch, 2007). These products are used for food, medicine, landscaping, and crafts such as basket making or floral arrangements. Forest farming is not the same as collecting these species from the wild, as it involves intentional management of the forest canopy and understory plant community to produce non-timber products.

Forest farms are generally established by thinning existing woodland to provide favorable light conditions for the species of interest (Backer & Saha, 2018). Trees are selected to be cut down to maximize the health of the forest and release potential crop trees that are desirable for future timber, such as oak and walnut. This makes forest farming compatible with select cut timber harvests and can be an excellent way to produce supplementary income from the woods until the trees are mature enough for harvest.

Nontimber Forest Products

Nontimber forest products (NTFPs) are high-value specialty products derived from a forest setting and include items grown and harvested for food, medicine,

landscaping, and craft (USDA, 1997; Chamberlain & Predny, n.d.). NTFPs do not include large-scale timber production but can include specialty timber and wood products for carving, such as burls (A tree growth in which the grain has grown in a deformed manner). NTFPs include medicinal and dietary supplements made from plants grown for their therapeutic value. Some examples of botanicals grown for medicinal use are ginseng, goldenseal, and black cohosh.

Benefits of Forest Farming

Forest farming can provide many benefits for the farmer, wildlife, forest health, and the environment. The active management of the forest helps to maintain and can even enhance its ecosystem functions, including increasing carbon sequestration, improving wildlife habitat, and boosting its overall productivity (USDA, 1997; FAO, 2017). In turn, this provides opportunities for the provision of important goods - including food, fuel, fibers, building materials, medicine, and raw craft supplies (Jones & Lynch, 2007). Landowners gain a greater appreciation of forests as an invaluable resource through the process of stewardship. Forest stewardship can provide personal mental well-being benefits. Several research studies have found evidence of the mental, emotional, and spiritual benefits of spending time in forests and working closely with nature (Oh et al., 2017). Beyond these health benefits for both the forest and the farmer, there are opportunities to generate short and long-term income from the forest through the production of NTFPs and timber simultaneously. Currently, NTFPs comprise a notable portion of the US forest economy, with their estimated value running into the tens of billions (Vaughan et al., 2013). NTFPs provide landowners with the opportunity to diversify and potentially increase their farm income.



*Box of assorted mushrooms
(photo credit: Center for Agroforestry)*

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