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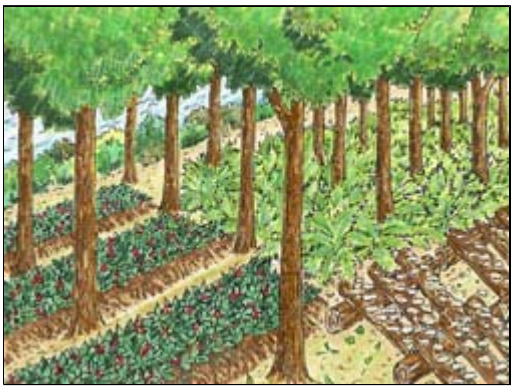

Discovering Profits in Unlikely Places: Agroforestry Opportunities for Added Income

by Scott J. Josiah

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1. Searching for Profit Niches On Your Farm

Let's take an armchair tour of your land. Let your mind wander over the fields, woods, creeks, and ditches around the farm. Are any of these areas underutilized? Can field borders, center pivot irrigation corners, and other areas less suitable for row crops be planted to trees or shrubs which can provide income and improve conservation? This publication highlights opportunities for Midwestern farmers to introduce agroforestry practices on their farms, outlines some of the benefits associated with agroforestry, describes six different agroforestry practices, and provides a list of resources for additional information.

Let's start by taking a closer look at your land.

Does your farm have... ...unsheltered farmsteads and livestock areas, fencelines, roads, and degraded windbreaks?

Profit Opportunities:

Wood fiber, lumber, and specialty forest products

Agroforestry Practice: Multipurpose windbreak

Multiple row windbreaks can be used to produce marketable products like hybrid poplar, black walnut wood and nuts, hazelnuts, and woody floral products from shrubs (such as curly, pussy, and basket willows, and red-and yellow-stem dogwoods). Evergreens such as spruce, pine, and firs add color in winter, protect

birds and other wildlife, can provide boughs for the seasonal floral industry, or can be sold as Christmas trees or landscaping stock.

Does your farm have...

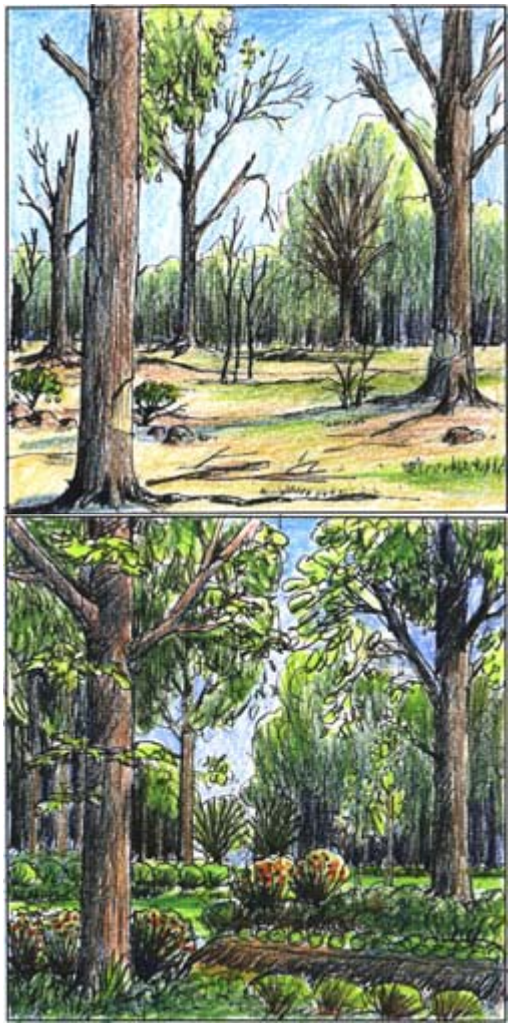
...neglected or grazed woodlots?

Profit Opportunities

Timber and specialty forest products

Agroforestry Practice: Forest farming

Improved woodlot management can produce higher quality timber and firewood. Woodlots also can be managed to produce valuable specialty forest products like ginseng and other medicinal plants, which are grown under shade. While prices fluctuate considerably, high-quality, woods-cultivated ginseng roots can sell for $370/pound or more.[1] Producing seed of oak-savanna prairie plants in more open forests is also a potentially profitable option.



Does your farm have...

...marginally-productive upland fields?

Profit Opportunities:

Fruit and nut crops

Agroforestry Practice: Alley cropping

Blueberries, chokecherries, highbush cranberries, sand cherries, elderberries, currants, gooseberries, and many others have great potential when marketed as locally-grown products, and with processors who produce high-end jams,

preserves, and wines. In north central Minnesota, one producer has established alley cropping with chokecherries, highbush cranberries, and blueberries. The taller shrubs and trees redirect snow onto the blueberries, insulating them from winter weather. These shrubs and small trees can also be part of windbreaks, living snow fences and forested riparian buffers, producing products while protecting the land.

Does your farm have...

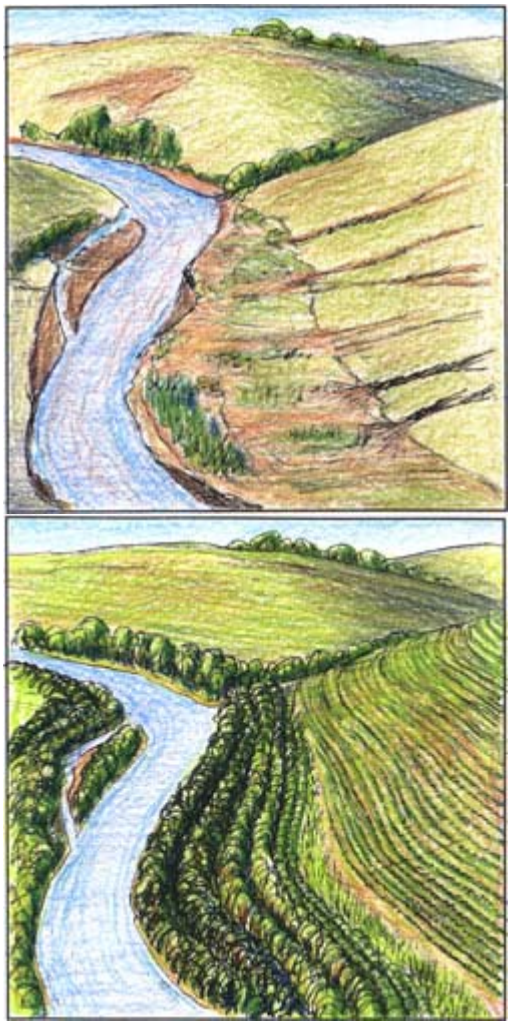
...areas along streams?

Profit Opportunities:

High-value hardwoods and specialty forest products

Agroforestry Practice: Riparian forest buffer

A wooded riparian buffer strip along a stream can combine trees, shrubs, herbaceous plants, and grasses to produce a variety of products. These can include wood from high-value hardwood species such as walnut, oak, maple, and ash, plants used for medicinal and botanical purposes, food products (berries, nuts, and mushrooms), specialty woods, woody floral products, and prairie grass seeds. The buffer also protects the stream, particularly in upland areas, intercepting chemicals and nutrients from adjacent agricultural lands and improving water quality.



Does your farm have...

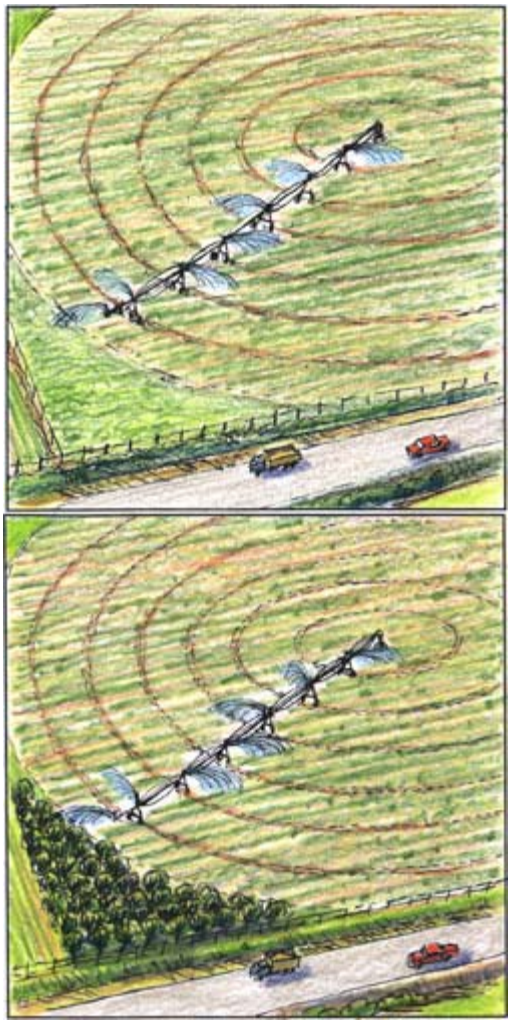
...corners not reached by pivot irrigation, or inconvenient, out-of-the-way or small parcels?

Profit Opportunities:

Hazelnuts, fruit, prairie seed

Agroforestry Practice: Woody crop plantation

Hybrid hazelnut, a new woody crop currently under development, shows good potential across the central and upper Midwest. Experimental plantings at Badgersett Research Farm in southeastern Minnesota suggest potential yields from clonally-produced selected lines of hazels ranging from 800 to 2,000 pounds per acre per year (dry pounds of whole nuts including shell) depending on spacing, variety, and weather.[2] As new cultivars are developed, higher yields may be possible. In 1998, the wholesale price for inshell hazelnuts was $0.49 per pound.[3]



Does your farm have...

...river bottomland fields where crops are frequently flooded?

Profit Opportunities:

Hybrid poplar or hybrid cottonwood wood fiber, or lumber

Agroforestry Practice: Woody crop plantation

On bottomland susceptible to flooding, a plantation of hybrid poplar or cottonwood may provide a more reliable crop over the years than corn or soybeans, whose yields can suffer from delayed planting or flooding. Fast growing trees like hybrid poplar or hybrid cottonwood can be harvested and sold for pulpwood and other

wood products every 10 to 15 years in Minnesota. The market for hybrid poplar pulpwood is still developing, but it is expected to sell for prices similar to aspen (about $60/cord in 1997 delivered to the mill).[4] On average, most land can produce 30 to 40 cords/acre or more during a ten-year period.[5] Some forest product companies have advanced purchase or lease agreements that can provide annual payments before the trees are harvested. And because these plantings can attract wildlife, hunting leases are also a possible income source.

[1]Persons, W.S., "Growing American Ginseng in its Native Woodland Habitat," *Proceedings of the North American Conference on Enterprise Development through Agroforestry: Farming in the Agroforest for Specialty Products, October 1998* (Center for Integrated Natural Resources and Agricultural Management, University of Minnesota. St. Paul, Minnesota).

[2]Rutter, Phil., *Badgersett Research Farm,* July 1996, Personal communication. Canton, Minnesota.

[3]Crop Values, National Agricultural Statistics Service, Agricultural Statistics Board, USDA. Feb. 2000.

[4]"The Market Place Newsletter," Summer 1998, *Minnesota Department of Natural Resources Forestry Division,* St. Paul, Minnesota.

[5]Teynor, T.M., and Edberg, K.L. "Market Opportunities for Hybrid Poplar in Minnesota," March 1996, *Minnesota Department of Agriculture,* St. Paul, Minnesota.

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