

ASSESSING THE MARKET POTENTIAL OF SPECIALTY FOREST PRODUCTS IN LOCAL FOOD SYSTEMS OF IOWA

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ABSTRACT

With the support of a grant from the Leopold Center for Sustainable Agriculture at Iowa State University, in 2004 Trees Forever conducted a snapshot study in north central and southeastern Iowa of 21 growers and 15 buyers of nontimber specialty forest products (SFPs). The purpose of the study was to evaluate the potential for the adoption of agroforestry practices—specifically, the production of SFPs such as fruit, nuts, and woody decorative florals—as a way to diversify farm crops and income sources for small- to medium-size producers.

This study departed from agroforestry marketing research efforts conducted elsewhere in the Midwest in that it focused on market potential within establishing local food systems. The premise for the study was that for producers already marketing produce within local food systems, perennial crops such as berries and woody decorative florals could expand their crops and their seasons.

The study concluded that the demand for nontimber specialty forest products exceeds the supply in these two regions of Iowa. In fact, a majority of the producers indicated they are producing as much as they care to, while many of the buyers suggested there is still plenty of room in the market for these products, especially those that are locally grown.

Keywords: Nontimber specialty forest products, marketing, local food systems, sustainable agriculture.

INTRODUCTION

Trees Forever is a nonprofit organization headquartered in Marion, Iowa, with field staff across Iowa and Illinois. The Trees Forever mission is to plant and care for trees and the environment by empowering people, building community, and promoting stewardship. Since 1989, Trees Forever has been providing programs that involve community volunteers and private landowners in projects that restore, protect, and celebrate natural resources. Trees Forever programs seek to improve water quality, care for community forests, restore and beautify roadsides, and work with diverse audiences.

In 2003, Trees Forever received a grant from the Leopold Center for Sustainable Agriculture at Iowa State University to conduct a market assessment of nontimber specialty forest products within local food systems in Iowa. This study fit within a larger five-year program Trees Forever initiated in 2003 entitled Working Watersheds: Buffers & Beyond™. The Working Watersheds program seeks to demonstrate how conservation buffers can improve water quality, enhance on-farm economic and ecological diversity, and create sustainable local environmental

benefits. One of the primary goals of this program is to increase adoption of agroforestry systems as viable enterprises to complement more conventional agriculture.

DEVELOPING A NETWORK BY TAPPING AN EXISTING ONE

While neighboring states have a developing network of producers and buyers of a diverse range of specialty forest products, a similar network does not exist in Iowa, with the exception of the Iowa Nut Growers or the Christmas Tree Growers. Trees Forever, therefore, proposed to identify agroforestry producers among those who define themselves as stakeholders in community-based agriculture. These networks of growers and buyers seek to develop sustainable regional systems of food and fiber production to supply local markets. They are able to connect with each other through the efforts of such agencies and associations as the Leopold Center for Sustainable Agriculture, the Iowa Network For Community Agriculture, and the Practical Farmers of Iowa. The goal for these groups, in part, is to connect consumers better to the land and to the farmers who farm that land. Trees Forever suggested with this study that SFPs could easily fit within these developing local food systems, thereby providing small- to medium-sized producers more opportunity to diversify their crops and income.

Mid-size producers in Iowa are those who farm 400-600 acres, with small farmers being defined as those with fewer than 400 acres in production (R. Orhtman, pers. comm., 2005). According to the Iowa Department of Agriculture and Land Stewardship, almost 90% of the land in Iowa is in agricultural production, much of it either growing corn or soybeans for the commodity markets. In 2003, Iowa led the nation in corn production and was second in the nation for soybeans. Introducing other, noncommodity crops was, therefore, suggested in this study as a way to diversify crops and provide supplemental sources of income.

GEOGRAPHIC REGIONS INCLUDED IN STUDY

Trees Forever proposed to study the potential for production and marketing of SFPs in southeastern and north central Iowa because each of these regions has newly established wholesale produce auctions and other existing local foods marketing efforts where producers of SFPs could connect with potential buyers. These already established marketing systems seemed to address some of the marketing issues that often hinder the production of specialty forest products. As identified by Teel and Buck (1998), existing markets are essential to the acceptance of alternative crop production: “since agroforestry systems take time to establish, the longer a delay in developing a market the greater the chance that a potential producer will decline to take the risk.”

Another reason these two areas of Iowa were chosen for the study was because they offered an opportunity to compare the acceptance of agroforestry practices in two regions with very different demographic, ecological, and agricultural characteristics. The southeastern portion of the state is more timbered and already has several walnut, chestnut, and pawpaw growers, so it was assumed that agroforestry systems would be more readily adopted than in north central

Iowa, which is not as heavily timbered and tends toward more row-cropping and livestock production.

STUDY METHODOLOGY

The interviews were structured to follow a uniform interview questionnaire developed by Trees Forever. The purpose of the interviews was to identify:

- current cultivation of and demand for nontimber forest products,
- grower awareness of potential for such crops, and
- market requirements for product packaging and/or bundling.

Producers were identified through the Trees Forever network of landowners, as well as through Trees Forever partners and the Iowa Network of Community Agriculture and Practical Farmers of Iowa. Current or potential buyers were identified through interviews with growers and through cold-calls to florists and roadside stands. Two important sources of information were the *Buy Fresh, Buy Local 2004-2005 Local Food Guide*, produced by Practical Farmers of Iowa and the University of Northern Iowa's Center for Energy and Environmental Education, and a similar guide produced in Wright County, Iowa, called the *Eat Wright Local Food Directory*. Tom Wahl, of the Southeast Iowa Nut Growers Cooperative, was another important source of referrals to growers.

FINDINGS REGARDING PRODUCERS OF NONTIMBER FOREST PRODUCTS

Plant selection and installation

Among the 21 producers interviewed, farm sizes ranged from 1 ½ acres to 415 acres. In all these operations, agroforestry practices typically represented a small portion of the land use. Among the producers with larger farm operations, tree and shrub species were selected and planted primarily to provide wildlife habitat, to conserve/stabilize soil, or to improve the farm's aesthetics. In most of these cases, the potential for the eventual marketing of a crop was also recognized. Many of those in this group noted that they regard the plantings as a hobby or an interest to pursue as they transition into retirement. Several also mentioned that the planting and maintenance of the trees and shrubs provide them an opportunity to work in the out-of-doors and with their spouses or other family members. Typical nut and berry species being grown included chestnut, black walnut, hickory, hazelnut, persimmon, pawpaw, heartnut, and pecan.

The growers with smaller-sized operations tended to plant as a way to diversify an already established operation. Among those associated with local food production, nontimber forest products were seen as a way to diversify their vegetable production. For those in the floral trade, producing their own woody florals was a way to guarantee supply and variety.

Many of the producers chose the species they planted based on recommendations from a contractor, their DNR district forester, the local RC&D, or based on information they learned from other growers, at conferences, or on the Internet. For those with larger wooded areas, nut-

or berry-bearing trees were often planted in addition to timber-producing species as part of a diversified planting. For those with smaller-sized parcels, woody species were typically planted on marginal land, often on steep, highly erodible slopes.

Shrubs planted for berry production or decorative florals, with a shorter time until harvestable, were considered ideal as a supplemental income to already established markets. Plants in this category included curly willow, pussy willow, bittersweet, winterberry, snowberry, dogwood, forsythia, viburnum, lilac, hydrangea, and wild grape. Other products valued for the decorative floral trade included pinecones, rosehips, and holiday greens. For the purpose of this study, Christmas trees were also included in this group.

Virtually all of the trees and shrubs were planted into former pastures. Many growers noted that they consider these perennial plants an ideal way to stabilize soil and provide wildlife habitat, while at the same time having the potential to produce income. They also cited the minimal maintenance required to grow these plants. Most growers indicated that their maintenance typically involves mowing about three times a year and corrective pruning in the first two or three years after planting. Some species require producers to mow the stems in the fall to stimulate growth. One producer grazes sheep instead of mowing due to the steepness of the slope and the lack of appropriate machinery.

Few of the growers have utilized federal cost-share programs, such as the USDA Conservation Reserve Program (CRP), to help offset costs for the installation of the tree and shrub species they considered part of their agroforestry systems. Those who did plant with the assistance of these programs tended to plant nut crops that take longer to reach maturity because current regulations limit the harvesting of crops from CRP land to personal consumption.

Marketing crops

Of the 21 producers interviewed, 19 already are selling edible crops and 15 are selling floral products. Products are being marketed directly to food cooperatives, health food stores, farmers markets, roadside stands, on-farm retail outlets, or directly to florists. One grower supplies approximately 1,000 pounds of chestnuts annually to five HyVee grocery stores in Dubuque, which is about a half-hour from his home. Only two growers mentioned selling directly to restaurants; one markets nuts, while the other supplies floral arrangements.

In the development of this study, an additional potential market was thought to be the local produce auctions operating in each of the two regions. The premise was that these auctions seem to be natural venues for the marketing of nontimber forest products. Both auction houses currently offer garden produce auctions that include products growers think would be desirable to buyers, which mainly include specialty grocers and restaurants. Currently, nuts would be challenging to market in this way, as the auctions typically close for the season on November 1 and most nuts are not consistently ready for market by then. Nevertheless, at least theoretically, if a grower wanted to bring berries or woody florals and is able to work out bundling/packaging requirements with the auction house, the auction houses have significant potential.

Few of the growers completed marketing plans ahead of planting. For those growers whose objectives for planting the trees and shrubs were primarily for wildlife habitat, recreation, soil

stabilization, or aesthetics, they viewed any potential crop sales from these trees and shrubs as a positive byproduct, but not as a standard of success. As one grower stated: “Primarily I am planting for my grandkids (currently 5-11 years old). I want them to appreciate nature and develop a land ethic and love the land as much as I do. I think this will give me something good to do as I ease into retirement. I’m really just feeling my way into this and learning as I go. I’m hoping that one of my grandkids will be able to benefit from what I am doing now.” Others noted that because nut crops take quite a few years before they are marketable, they have time yet to develop their market plans.

Growers who planted berry-bearing shrubs or decorative florals viewed these plantings as a potential way to diversify an already thriving business. They might also have been motivated by additional benefits, such as stabilizing soil or putting idle land to a more sustainable use than row crops, but many of these growers already have an established customer base that creates enough demand for their supply.

Of those growers who did conduct some market research, most said they relied on professional associations for species selection and pricing recommendations. Some of the associations mentioned included the Cut Flower Association, Christmas Tree Growers Association, and the Iowa Nut Growers Association. Producers also noted Internet sources of information, including the USDA website for prices that wholesalers are paying. Additionally, many learned of the market potential of some of these crops through word of mouth from other growers. Several noted the assistance they received through Tom Wahl, a strong advocate for the potential represented by chestnuts, hazelnuts, heart nuts, pawpaws, and persimmon. Phil Rutter, of Badgersett Farm in Canton, Minnesota, was also noted for his guidance and influence regarding chestnut production.

Many growers who sell to retail businesses said that they typically find new customers by loading their products into their vehicles and traveling from store to store showing their products. They emphasize to potential buyers the freshness of their products and negotiate a delivery schedule for those interested in purchasing future crops. These growers, however, noted the significant amount of time this type of marketing requires.

Many producers identified a “pull” factor for nontimber forest products that is driven by customer requests. Demand ranges from requests for specific crops or for experiences, also called “agritainment.” In the latter case, customers are seeking on-farm opportunities to harvest crops, such as raspberries or Christmas trees. Many producers noted an increased interest among consumers for locally grown products and feel these customers are willing to pay a premium for these crops.

Several producers identified the need to educate their customers about how to process a product, such as how to hull and prepare chestnuts for consumption. Some of these producers expressed a concern that consumers have become too accustomed to processed foods and may not value the “U-Pick” experience and preparation requirements of fresh-from-the-farm products. The increased need for processing is daunting to many of these growers and several expressed the need to establish a partnership with someone willing to process the products or to form cooperatives to help with processing and distribution.

FINDINGS REGARDING BUYERS OF NONTIMBER FOREST PRODUCTS

Of the 15 buyers interviewed, nine are already buying edible nontimber forest products locally and are interested in finding more local sources of butternuts, walnuts, hickory nuts, and hazelnuts. Buyers are interested most in seasonal products. They value having products delivered to them on an “as-needed” basis and are not interested in needing to store an inventory. Buyers prefer the least amount of processing necessary for them to sell locally produced nontimber products. Chestnuts were often cited as being too difficult to process.

Some of the buyers suggested that the high costs of local products sometimes can be seen as discouraging sales, but others said their customers seem willing to pay a premium if a product is well labeled as a locally grown crop. Those with businesses the owners consider agritainment indicated their customers place a higher value on local products because they regard these products as part of the “experience.”

Buyers are most concerned about the quality of products, reliability of delivery, and “competitive pricing.” Those most concerned with competitive pricing typically were in the floral trade and often indicated the close profit margins they work under. Many said they have friends or family harvesting woody decorative products for them for free. Perhaps because of the number of “free” products these retailers receive, a significant number seemed to consider purchasing locally grown or harvested products as too expensive for their businesses. Conversely, other potential buyers seem to think that locally grown products might be less expensive than what they are currently purchasing from their wholesale distributors, although they did not offer a basis for this conclusion.

Florists frequently said they consider woody florals as “filler” for arrangements and are happy to have such products if they can get them, but otherwise can “make do” with other products from their wholesale distributors. Of this group, many said they often purchase nontimber forest products from producers who “drop in,” but few have regular local suppliers, saying they consider distributors to be preferable, as the buyers can place orders as needed and can rely on receiving those orders the next day.

The buyers of floral products most frequently indicated an interest in having a greater availability of a diversity of woody floral products. If they can get these reliably and consistently, they seemed more willing to buy locally. Woody floral products most in demand included curly willow, pussy willow, bittersweet, pinecones, winterberry, snowberry, dogwood, forsythia, viburnum, lilac, hydrangea, grapevine, rosehips, and holiday greens.

Buyers of edible products, particularly nuts and maple syrup, tend to be food cooperatives and health food stores. Consumers frequenting these establishments typically are better educated about the community and health benefits of buying locally and are willing to pay a premium for those products. Nevertheless, processing is again a big concern for these retailers. They typically buy presorted nuts in bulk and either sell them in bulk or do a minimum amount of processing, often nothing more than re-sorting them into smaller containers.

SUMMARY AND RECOMMENDATIONS

While the research conducted for this study provides a very small snapshot of the current state of the market for nontimber forest products in Iowa, results seem to substantiate the potential for these products within growing local food and fiber systems. For producers already marketing produce within local food system networks, these products offer an opportunity to expand their crops and their seasons to include perennials, such as berries and woody decorative florals. This market is still relatively untapped in Iowa and can provide small- to medium-sized producers an opportunity to diversify their crops and income.

A majority of the producers indicated they are producing as much as they care to, while many of the buyers suggested that there is still plenty of room in the market for these products, especially those that are locally grown. A small number of the producers expressed concern that this might cause an increase in production and a subsequent saturation of the market; however, other producers asserted that most people are not interested in putting in the amount of labor required to market nontimber forest products.

Growers expressed an overwhelming need for assistance with the marketing and distribution of nontimber forest products and crops. Many suggested the need for cooperatives or brokers to help with this. Those in the Southeast Iowa Nut Growers Cooperative noted how much of an asset this cooperative has been to their operations, especially as a network for peer-to-peer education and information, as well as for product distribution when supply exceeds demand among their regular customers. This cooperative is also helping to address another concern expressed by both producers and growers: the challenge of processing products, especially chestnuts. In answer to this need, the Cooperative has spun off a new business, the Winfield Tree-Grown Foods, LLP, which cures, shells, and markets chestnuts that are too small for the bulk market. The business is newly formed but already has a longer list of customers in Iowa and the Chicago area than they are able to supply.

If the need for education and information dissemination is being met, it is within established cooperatives and associations. However, for many of the newer niche products, there is still a gap between research/experience and producers and small retail buyers. For example, a large proportion in these groups expressed a need for education about how to price and better market the value of products within a competitive market place. While Trees Forever interviewers offered materials from the USDA National Agroforestry Center, University of Nebraska-Lincoln, and the National Arbor Day Foundation, it is evident a definite need exists in Iowa to assist growers and buyers of specialty nontimber forest products to access information and research, and develop networks to help further the effort in Iowa.

Although not considered a problem to buyers, it is also necessary to educate those who harvest and “donate” woody floral products to florists. These undoubtedly well-meaning harvesters need to realize they could be damaging a local industry by undercutting growers who are cultivating a crop such as bittersweet or grapevines. To that end, the social marketing aspect of agroforestry needs to be emphasized; that is, the ability of growers to generate income from their nontimber specialty forest products can lead to more viable rural communities, where small- to mid-sized farmers are able to make a living and support local businesses.

EVALUATION

The interviews and analysis completed for this project seem to confirm the initial theory underpinning the research: demand for nontimber specialty forest products exceeds supply. The growers and buyers interviewed demonstrate that there is significant potential for those who are willing to commit their time and passion to growing and marketing these niche products.

The research cannot as confidently be said to support another early proposition of the study. Because a sufficient number of growers was not found in north-central Iowa, the acceptance of agroforestry practices cannot be compared in the two regions with very different demographic, ecological, and agricultural characteristics. The working theory was that because the southeastern portion of the state has more timber and already has several walnut, chestnut, and pawpaw growers, agroforestry systems would be more readily adopted than in north-central Iowa, which is not as heavily timbered and tends toward more row-cropping and livestock production. What the research does corroborate is that nut production is rapidly gaining viability in southeast Iowa because of the years of research, experimentation, and networking that has already occurred there. The interviews further suggest that local production and marketing of woody florals is a very new market to a significant portion of the growers and buyers interviewed.

The research also seems to bear out the fact that while neighboring states have a developing network of producers and buyers of a diverse range of specialty forest products, these connections are still relatively nonexistent in Iowa. The most activity tends to be within the already established networks of community-based agriculture. A significant need exists for outreach and education within Iowa to help producers and buyers consider the potential for growing and marketing these perennial crops that can diversify their operations, improve habitat, and provide opportunities for recreation, community, and local and regional ecological enhancement.

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