

Agroforestry on the Farm

Little Deb's Berry Farm – Newhall, Iowa

Jeff and Deb Sindelar own and operate Little Deb's Barry Farm near Newhall, Iowa. After retirement, Jeff became interested in honeyberries after discovering them in what Jeff calls "the glossy catalogs" of seeds and plants that come every winter. Looking for a replacement to blueberries, which required amending his soils, he was intrigued that honeyberries produced so early in the season, often earlier than strawberries. June is when many cultivars are ripe to harvest, and by the 4th of July, most are done producing. Honeyberries have a higher antioxidant score than blueberries, as well as a great taste.

According to experienced growers and plantings tracked by the University of Saskatchewan, honeyberries don't sucker like some other types of invasive honeysuckle; they may send up new shoots from the crown but they don't sucker like the invasive honeysuckle. Suckering is when a plant forms shoots or sprouts from its roots/stem that often become new clone plants. Honeyberry is also self-incompatible, which means that it needs a different variety of blooms at the same time for adequate cross-pollination.

Jeff began planting some of the named varieties that nurseries and breeding programs have released. In 2018, he attended the University of Saskatchewan in Canada to learn how to grow haskap berries, as well as to get a first-hand account of commercial honeyberry production. This also inspired him to try out more varieties of honeyberries from all over North America. More recently, he has partnered with other growers to test newer cultivars, including those who are members of Practical Farmers of Iowa (PFI). Through his partnership with (PFI), he has been able to share what he has learned about these new cultivars with other growers who are interested in this new and exciting crop.

Honeyberries growing on a bush.



Honeyberries of all sizes being measured.



Goals of the Farm

- Test various fruit and nut crops on the farm for commercial viability
- Educate the public and other growers about the health aspects and opportunities for growing honeyberries
- Increase direct market sales and extend the season through value added products

Farm Management Practices

“One of the things we’ve learned by trying out all these different varieties is how they grow. For instance, some of the Russian varieties are compact and could be planted with three feet between plants. However, most other varieties will bush out a little and spacing for them is more like five feet between plants,” says Jeff.

The agroforestry system design is a five-foot-wide row of finely chopped woodchips, sawdust-like material, with woven landscape fabric laid on top. There is then another layer of “traditional” woodchips on top of the landscape fabric. Jeff prefers this method because the sawdust under the landscape fabric begins to decompose and contributes to biological activity at the soil surface. The woodchips on top of the fabric are also decomposing, and the combination of the two helps to break down the woven landscape fabric over time.

Between the five-foot rows of woodchips is a mowed five-foot turfgrass strip. Potted seedlings are planted into the mulch and landscape fabric. The mulch, along with any hand weeding, is all the weed control that is needed. The turfgrass is mowed to keep things looking tidy.

Disease issues are minimal, with powdery mildew occasionally posing a concern. However, because the plants produce early in the season, disease is not typically a major impediment. Traditional farm pests can show up from time to time, such as gophers and rabbits. However, there is one pest that is absolutely crucial to control.

The main pest issue for Jeff is birds, specifically cedar waxwings. “You will absolutely need to net your plants if you intend to do this on any sort of scale,” Jeff says. To facilitate the process of netting his rows of shrubs, Jeff has devised a system of posts and cable loops that create a structure that supports the netting. This method allows two people to efficiently put up and take down the netting as needed, depending on the risk to the crop.

Rows of honeyberry bushes planted five feet apart with five -foot-wide turfgrass alleyways separating each row.



Marketing & Economics

Jeff and Deb market fresh berries through social media, farmer's markets, and direct sales to end users. Deb has also experimented with some value-added products; she has tested out various jams and jellies in her kitchen that are made from the farm's honeyberries. Given the health benefits of the deep blue colored berries, the Sindelars are now working with local schools to determine the best way to get the berries into the lunch programs. The immediate challenge is the timing of the harvest in June, with school not starting until mid to late August. Thus, since fresh berries cannot be used, they are investigating using frozen berries, a value-added product. Frozen berries can be used as an ingredient in mixed fruit, muffins, yogurt, salads, and more.

Selling frozen berries to the schools requires a food safety plan and attention to detail at every step of the process. Berries are harvested and put into fridges immediately to preserve freshness. The berries are then washed and dried before being frozen for longer term storage, so they are ready for the schools starting in August.

According to Jeff, the berries sell themselves. "Once the customer tastes the berries, they tend to get hooked, they really are unique," he says. At this point with so few growers of honeyberries, the price is \$9.00 per pound and has remained stable. It helps that they are the first berry crop of the season when customers are hungry for fresh grown fruits. Yields depend on the variety, and with so many different varieties being tested, pounds per shrub can fluctuate from less than one pound per shrub to ten pounds per shrub for mature plants. Jeff expects that he might be able to reach full production by year five or six, depending on growing conditions.

Lessons Learned

Jeff has several suggestions for new growers. First, find reputable nurseries that keep good records, so you can feel confident they are selling what they say they are selling. Differences in varieties can be huge; taste, size of fruit, and growth form are a few of these differences. Thus, it is important to know what cultivar you are buying.

Nurseries and plant-breeders are cataloging varieties based on first-hand accounts of growers from Canada and the United States. This information is important to provide to new growers, no matter where they live, so that they have an idea of how well that cultivar or experimental genotype will do in a particular climate and location. Cataloging includes asking growers to rate various traits including the size of plants, their harvestability, fruit size, ripening time, and other characteristics of each cultivar, and then mapping that data across the landscape.

Jeff's second piece of advice is to consider using the Borealis series of plants that have been selected for good fruit size, taste, and yields. These varieties include Beauty, Beast, and Blizzard and they are some of the newer cultivars. A third piece of advice includes being organized and ready for harvest time. While the fruit can persist on the shrub for a week or longer, growers wanting to sell a high-quality fresh product, or a value-added product, will want to get berries into refrigeration soon after picking. Quick refrigeration ensures that the honeyberries will stay fresh from one to three weeks, depending on the variety.



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