

# AGROFORESTY ON THE FARM

EAST HOLBROOK CHESTNUT GROVE

NEWHALL, IOWA

ELANA GINGERICH | 2023



## About the Farm

Elana Gingerich grew up in Iowa and remembers her father talking about the travesty of soil erosion. She recalls how this precious resource was blown away, or lost down rivers and streams, due to the way that many people farm. Millions of acres lay relatively bare through late fall, winter, and spring, which is almost six months exposed to the elements. Elana then came across the seminal book, *Tree Crops* by J. Russell Smith, which exposed her to the world of permanent agriculture. Reading *Tree Crops* prompted Elana to go down her agroforestry path, and she has never looked back. After completing an internship with Red Fern Farm near Wapello, Iowa, her decision to be a farmer and agroforester was solidified.

East Holbrook Chestnut Grove was established in 2015 and includes roughly 40 acres of timber, pastures, and orchards. As the name implies, Elana grows primarily chestnuts but that is not all; she also grows pawpaws, persimmon, hazelnut, Asian pears, heirloom apples, gooseberries, hickories, and more. There is also a small herd of cattle being raised at East Holbrook Chestnut Grove.

“My first big planting was in a sloping pasture adjacent to Old Man’s Creek and I planted all sorts of different things, but mostly chestnuts and pawpaw. Those trees are producing now and it is really rewarding to see some of my first seedling finally producing fruit and nuts. It motivates me to keep on going,” said Elana.



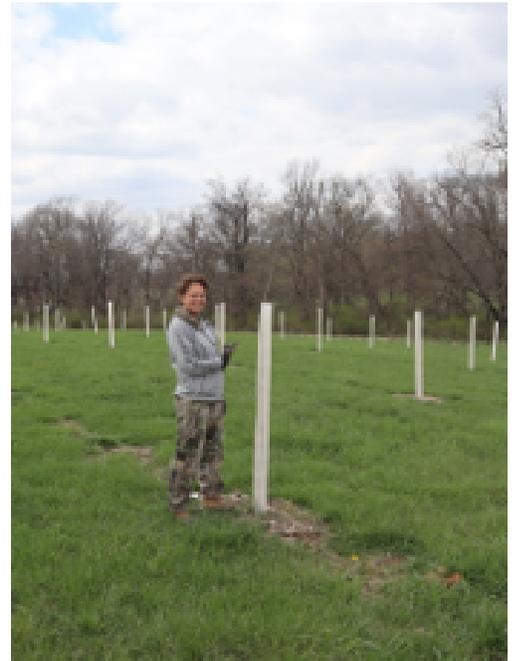
The first planting was a combination of alley cropping and silvopasture with wide rows for forage; however, over time Elana decided to graze cattle in the pasture and she started filling in the rows with more trees to achieve an orchard configuration. Today the cattle are removed from that area and the trees are just starting to produce chestnuts and pawpaw.

Elana estimates she has over 1,000 chestnut trees and approximately 500 trees and shrubs of varying species and varieties. Elana is an experienced grafter, so she shares her expertise with others by teaching grafting workshops and classes. The workshops give novice gardeners and orchardists the opportunity to improve and expand their orchards with better quality fruit and nuts. This skill also opens an additional revenue option for Elana.



Chestnut tree genetics include seedlings of Peach, Mossbarger, Sleeping Giant, Qing, Luvall's Monster, and other cultivars. Chestnuts are a perishable crop that should be harvested immediately after they fall from the tree and put into refrigeration. Harvest can last several weeks. High quality chestnuts are in demand and customers will travel significant distances to purchase or pick the nuts.

In the farm's early years, Elana planted potted chestnut seedlings purchased from reputable sources. Now she has shifted to planting chestnut seeds directly into the soil. The chestnut trees grow at an incredible rate when protected by a tree tube; they grow even faster than potted chestnut seedlings. Trees grown from seed can grow out of the top of a five-foot tree tube in only two years with proper care and sufficient moisture. This method of direct seedling saves time and money.



Elana's chestnuts are planted 20 foot by 20 foot, so she has roughly 108 trees per acre. Selecting a good site is paramount to success, as chestnuts need well drained soil and do not like "wet feet."

The other main crop grown at East Holbrook Chestnut Farm is pawpaw. Varieties include Shenandoah, Susquehanna, Allegany, and Iowa Golden. Pawpaw is a yellow custard fruit that many claim tastes like a combination of mangoes, banana, and vanilla. In fact, it is sometimes known as the "prairie banana" because it has a tropical fruit feel and taste, and it grows well in the middle of the Midwest. Pawpaw is best enjoyed fresh, used in ice cream, cheesecake, or smoothies. Pawpaw puree is also prized for its unique taste and consistency.

Every company and nonprofit have different needs. A strong partnership addresses the needs of both parties to ensure a meaningful and beneficial partnership. Does the company want a one-day event for 20 volunteers, or do they want an ongoing volunteer program? Does the nonprofit need a specific skill set or can they train volunteers on what they need? Projects should be tailored to fit the values, talents, and schedules of both parties. A strong nonprofit volunteer program will also take care not to overpromise or allow mission creep when offering volunteer opportunities. A volunteer event without a meaningful outcome is a waste of both the company and the nonprofit's time. The clear communication of goals and needs up front so that appropriate opportunities can be planned helps both sides have a positive and productive engagement.

The Pawpaw has a unique relationship with the Zebra Swallowtail butterfly, a butterfly that only lays its eggs on the Pawpaw tree. Pawpaw trees are a natural forest under-story crop and can tolerate growing in the shade of taller trees, although shade may compromise fruit yield. They are planted between chestnut trees to create a multi-crop and multi-story orchard.



## Marketing and Economics

Elana sells her crops directly to her customers through social media and her website. She also offers customers the opportunity to trade their labor for picking nuts, fruit, and collecting plant material. Three-pound boxes of fresh Pawpaw fruit are sold for \$15 during the growing season. Chestnuts go for up to \$4 per pound. Once production ramps up, Elana will sell her chestnut crop to Prairie Grove Chestnut Growers, an association of more than 60 growers from Iowa, Illinois, and Missouri.

When Prairie Grove Chestnut Growers receive nuts from their member growers, they clean and sort the nuts into size classes. Nuts are aggregated and sold to more than 1,000 customers in more than 40 states. High quality nuts retail from Prairie Grove Chestnut Growers for \$5-\$6 per pound, depending on the quantity. Nuts are sold in 10,20,40, and 100-pound lots, and typically sell out before Christmas.

Elana supplements her income by selling trees, in addition to nuts and fruit. Chestnut seedlings grown in a 4x4x9 inch pots sell for \$15 each, with a discount for bulk orders. Pawpaw seedlings from high quality genetics also sell for \$15 each, with discounts for bulk orders. Tree seedlings are usually only available from July through September.

Several hundred thousand customers are in close proximity to East Holbrook Chestnut Grove, which is situated forty-five minutes from Cedar Rapids metro area and about thirty minutes from Iowa City metro area. Elana also sells plant material and offers farm excursions, where customers can come to the farm for tours, classes, and experiences.





## Lesson Learned

Elana has two very practical pieces of advice for new growers. First, she recommends getting a job or have some other off-farm income because tree crops are not an immediate source of income. It takes time for trees and shrubs to grow and begin to produce nuts and fruit. The second piece of advice is to use a tape measure when spacing out rows, don't simply "pace things out" because it's nice to have straight and even rows.

Beyond that, Elana reminds new growers to be patient and, most importantly, to observe. She recommends walking your orchard and seeing how different trees and shrubs are growing. Notice when plants are stressed or those that are particularly susceptible to a specific insect. She encourages beginners to start slow and to learn from their mistakes. No one knows it all when they first get started, there is a certain level of learning that happens along the way.

As Elana was getting started, she sought out experience growers who were doing the same things she wanted to do. She talked to them, visited their farms, asked questions, and learned from those that did it before. She recommends farm visits as a valuable learning tool to learn the different approaches that other farmers take. At the same time, she says to not be afraid to try out new methods that others may not be familiar with yet.

To learn more , visit [www.TreesForever.org/accleratingagroforestry](http://www.TreesForever.org/accleratingagroforestry) or contact us at [info@treesforever.org](mailto:info@treesforever.org).

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