More than 20 farmers, agricultural extension agents and would-be agriculturalists mixed a slurry of cow manure, eggshells and volcanic dust by shovel recently at an Accomac farm.

They were making biodynamic barrel compound, a potent compost and part of the “Permaculture Profits” field day at Perennial Roots farm.

The on-farm education event hosted by Future Harvest Chesapeake Alliance for Sustainable Agriculture, in partnership with the Eastern Shore Resource Conservation and Development Council, aimed at sharing knowledge on permaculture, specialty crop production and integrated pasture management for small-scale farmers.

Visitors came from as far as Washington, D.C., for the workshop and potluck lunch on Friday, April 28.

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“We want to empower people that they can create their own fertility — and it's not hard,” said Perennial Roots co-founder Natalie McGill.

McGill and Stewart Lundy launched their permaculture project in 2010 with the intention of stocking their own kitchen, the couple said.

But the farm has bloomed into a thriving business, with Perennial Roots selling its heirloom vegetables, pastured chicken and duck eggs, pork and lamb to local markets.

McGill and Lundy are constantly researching and testing new practices, as evidenced in their shift toward biodynamic farming.

Founded by Rudolf Steiner in the 1920s, biodynamics describes an organic, holistic and regenerative approach to agriculture.

It focuses the farm as an ecosystem that exists within the larger environment.

“For me, health is maximum volume of life and maximum diversity,” Lundy said. “Something that from within itself can make its own fertility — that’s the goal.”

But “biodynamics isn’t farming,” he told the crowd. “It’s something you do on top of farming. You have to have a good farm, good practices first.”
Accomac’s Perennial Roots farm raises breeds well suited to the Eastern Shore, including its Kunekune pigs. Known for their docile nature, Kunes share space well with other animals and their grazing leaves pastures largely undisturbed, making them a good fit for the permaculture farm. (Photo: Photo courtesy of Natalie McGill)

At Perennial Roots, those practices include regularly mowing the grass to create “a constant pump of sugar into the soil, which goes into our fruit trees,” Lundy said.

He and McGill also raise breeds best suited to the Eastern Shore.

“We try to grow varieties that are very well adapted to the climate (and) humidity,” McGill said.

“Selecting species that are already adapted — that’s half of the battle,” Lundy said.

Their mulefoot hogs have solid, rather than cloven, hooves, which helps prevent foot rot in the muggy Southeast, for example.

Though being largely self-sufficient lowers the grocery bill, “Permaculture Profits” aimed to help small-scale farmers increase their revenues, too.

Patrick Johnson, an extension agent for Virginia State University and longtime small farmer, addressed the business side of permaculture.

“I want to be a good steward of nature, but I also want to make money,” Johnson said. “That’s called ‘production permaculture.’"

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Healthy soil remains the keystone of successful farming, he said, but other factors also affect yields.

A high tunnel boosts productivity and extends the farming season, for example, but Johnson warned farmers to prepare for the labor that goes into a tunnel.

The tunnels need good air circulation as well as access to plenty of water, the right ratios of shade to sunlight, acceptable temperatures and fertile soil.

Intensive planting — a method of gardening that works with nature to raise healthy plants with smaller space and less water — is another way to increase profits, Johnson said.

VSU calls it the “43,560 Project,” based on the number of square feet in one acre. With a lot of hard work, farmers can gross $1 for each square foot, or $43,560 per acre, according to the model.

“It’s feasible, but it takes a lot to get to that level,” Johnson said, warning of the need for full-time workers and a ready market to turn such a profit.
But, by putting in the labor and following permaculture principles, it could be an attainable goal, he said.

Johnson said workshops like the one of Perennial Roots help small farmers by increasing their pool of knowledge.

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"I always call permaculture an open-source system where people are learning things through sharing," Johnson said.

"But I would caution you about your sources," he added. "Do things that have been, to some degree, vetted."

At the end of the field day, visitors took their homemade compost home with instructions for how to use it on their farms.

"Whenever someone comes, we try to do something hands-on that they've never done before, but that's a tool for them," Lundy said.

Lauren Giordano, of the Future Harvest beginning farmer training program, agreed: "I've heard a little about biodynamics, but seeing it actually in practice and getting hands-on experience is very helpful, versus seeing it in a lecture."

To learn more about Lundy and McGill's biodynamic farm in Accomac, visit [www.perennialroots.com](http://www.perennialroots.com), search for "Perennial Roots Farm" on Facebook, or visit @perennialroots on Twitter and Instagram.

Visit [www.futureharvestcasa.org](https://www.futureharvestcasa.org) for more information on Future Harvest CASA and its upcoming farm events.