



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
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Hardin County Extension News Release

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Kenton Host to Ohio No-Till Field Day

Hardin County – No-till farming sounds simple. Just don't till the soil, right? Farmers know better. Adopting no-till requires understanding how it affects drainage, soil structure, organic matter, weed control, and the application of pesticides and chemical fertilizers, all of which influence both yields and environmental impacts, said Randall Reeder, retired agricultural engineering specialist with Ohio State University Extension and executive director of the Ohio No-Till Council.

That's why the council offers a series of events throughout the year to support farmers interested in adopting no-till for its ability to control erosion, conserve soil moisture, minimize fuel and labor costs, and build soil structure and health. Done properly, no-till systems can meet or exceed conventional tilled crop yields while reducing fuel and equipment costs.

The next event, in cooperation with [OSU Extension](#), the [Ohio Agricultural Research and Development Center](#), and other sponsors, is the [Ohio No-Till Summer Field Day](#), August 31 on the Jan Layman Farm, 15238 Township Road 119, Kenton. OSU Extension and OARDC are the outreach and research arms of The Ohio State University's [College of Food, Agricultural, and Environmental Sciences](#).

Several sessions at the August 31st field day will address the use of cover crops in no-till systems, Reeder said. Participants will be able to compare different types of cover crops planted after wheat harvest earlier this summer. "Soil that has been farmed for 100 years has lost a lot of organic matter," Reeder said. "For the typical farmland in northwest Ohio, the organic matter is probably less than half of what it was before they started farming that land. "But by using continuous no-till, cover crops, proper rotation and a few other techniques that provide a continuous living cover, you're mimicking nature. You're not just conserving soil, but building soil."

Using cover crops in a continuous no-till system could help alleviate phosphorus runoff and the resulting toxic algae blooms in Lake Erie and other waterways in the region, Reeder said. At the field day, participants will be able to see how cover crops affect the soil underground, including infiltration testing, by viewing a soil pit during one of the demonstrations. One session, "Digging Deeper into Soil Health,"

will be led by Jim Hoorman, an OSU Extension educator. His talk will focus on soil microbes, particularly beneficial fungi.

“During years of drought, or dry years like we’re experiencing now, it’s very beneficial to have these microbes in the soil,” said Hoorman, who will be leaving OSU Extension in mid-August for a position with the U.S. Department of Agriculture’s Natural Resources Conservation Service as a soil health and cover crop specialist for Ohio and southern Michigan. “Just about every nutrient we’ve studied has something to do with these mycorrhizal fungi. They really enhance plant nutrition.” Hoorman said the fungi need five to eight months with some type of crop growing on the land to reproduce in soil. Corn and soybeans are normally on the land only four to five months.

“So, there’s not much time to get a lot of mycorrhizae growing,” he said. “Planting cover crops can bridge that gap and allow the mycorrhizae to complete their life cycle and reproduce more efficiently. Tillage destroys the mycorrhizal networks, and as a result, it can take three, five or even up to seven years for no-till soil to recover when a farmer changes from a conventional to a no-till system. Cover crops and no-till together speed up the process.” Hoorman’s presentation will provide detailed information about the process to participants.

Among others on the agenda are Norm Fausey of USDA’s Agricultural Research Service in Columbus, who will offer a “Water Management and Water Quality Update”; and Dan DeSutter, an Indiana no-till farmer who has 5,000 acres of cover crops, who will discuss “The Economics of Resilience.” Equipment demonstrations include Aqua-Till, which uses ultra-high-pressure water jets to cut into the soil for planting, and a John Deere 2510H dry fertilizer injector.

Early registration for the event is \$40 by August 22. On-site registration is \$60. Registration includes lunch. A complete agenda and both online registration and a printable, mailable registration form are available at ohionotillcouncil.com/2016/06/29/hardin-county-event/. Anyone with questions about registration may contact Bret Margraf at bmargraf@conservesenecacounty.com or 419-447-7073.

The event is being sponsored by the Ohio No-Till Council, the [Ohio Soybean Council](#), the [Ohio Corn Marketing Program](#), the [Soil and Water Conservation Society](#), OSU Extension, OARDC, [NRCS-USDA](#), the [Hardin Soil and Water Conservation District](#), and [Ohio’s Country Journal](#).

Article written by Martha Filipic, OSU College of Food, Agricultural and Environmental Sciences and edited by Mark Badertscher, OSU Extension-Hardin County.