



Farmers Improving Soil Health

NO-TILL NUGGETS

Pennsylvania No-Till Alliance

August 2026

PA No-Till Alliance Summer Field Days

Achieving “Above Average Yields from Below Average Soils.”

That phrase best summarizes what keynote speaker Egon Zunckel has been able to accomplish on 12,000 acres in South Africa over the past 32 years.

When he returned to what he describes as a “basically worn-out farm” he realized conventional tillage wasn’t working, so he switched to conservation tillage but found it didn’t help as much as he had hoped.

He then experimented with no-till which “mitigated a lot of the problems we had,” he said, but still did not achieve the results he was looking for. The next step, as has been the case for many farmers in PA, was to incorporate cover crops into his no-till program. And in his words, “that’s when things really took off.”

After starting with a simple cover crop of oats, he now uses a diverse mix of various species including legumes and brassicas, tailored to the primary crop to follow.



Keynote speaker Egon Zunckel speaks to a large crowd at Flinchbaugh’s Orchard & Farm Market in Hellam on July 23.

More recently Zunckel has added cattle to the operation, which graze on crop residues and cover crops and have resulted in a vast positive change in his soils. This rep-

resents the final step in what Zunckel sees as the five core principles of soil health: keep the ground covered 12 months a year,

More **ZUNCKEL**, page 2

The “Frontier of Soil Testing”

Al Toops, a soil scientist from Oklahoma, spoke at the Alliance Field Day about the need to go beyond simply testing the soil for the standard N-P-K nutrient content. This approach is what he terms, “the frontier of soil testing” and involves DNA sequencing via genomics.

This biological approach to soil testing is able to identify all living things in the soil and evaluate them on a performance basis. “Conventional testing shows what’s present in the soil,” Toops said. “Soil performance reporting shows what the soil can actually deliver.”

Another aspect of this approach is that while the conventional emphasis on applying nitrogen, phosphorus and potassium according to anticipated crop needs, it does not consider



Al Toops educates Field Day attendees on soil fertility versus soil function.

the importance of carbon and the biological functions that make nutrients accessible to plants. Accordingly, Toops maintains that there are thousands of pounds of nutrients in soil that we can’t utilize since those biological factors are being limited.

Toops acknowledges that there is still much to learn about this cutting-edge approach, especially with regard to the inter-

More **TOOPS**, page 2

Secretary Russell Redding Discusses REAP at the Eastern Field Day

During the field day at Flinchbaugh's Orchard & Farm Market, Secretary Russell Redding encouraged Pennsylvania farmers to apply for the \$13 million in tax credits available through Pennsylvania's Conservation Financing Program, Resource Enhancement and Protection (REAP).

REAP tax credits can be combined with other state funding, including the Agriculture Conservation Assistance Program, and Conservation Excellence Grants, in addition to federal funding, to help pay for farm enhancements that protect the environment and the farmer's bottom line

"More than ever, Pennsylvania farmers are investing their own resources in cleaner water and productive soil to sustain us in the future," Secretary Redding said. "Their dollars, are paying off in the form of healthier waterways and a greener future for Pennsylvania farms and communities. The visionary leadership of the Pennsylvania



Secretary Russell Redding

No-Till Alliance and farm families like the Flinchbaughs is no small part of that greener future."

Pennsylvania's is accepting applications for REAP tax credits beginning August 1, 2026 from agricultural producers who implement best management practices or purchase equipment to reduce nutrient and sediment runoff, enhance soil health and improve water quality across the Commonwealth.

REAP applications are reviewed on a first-come, first-served basis. Due to the popularity of the program, funds may run out before the October 31, 2026 deadline to apply.

More information about REAP, including the 2026-27 application packet, program guidelines and sponsorship process, is available at agriculture.pa.gov.

EPA Administrator Amy VanBlarcom-Lackey Visits the Field Day

During her remarks welcoming the crowd at the Alliance field day on July 23rd EPA Mid-Atlantic Regional Administrator Amy VanBlarcom-Lackey announced a new federal Regenerative Pilot Program to be administered in partnership with USDA. This initiative is in response to Executive Order 14414, Advancing Regenerative Agriculture and Strengthening American Farm Resilience. Details are still being worked out, so watch this newsletter for more information as it becomes available.



Amy VanBlarcom-Lackey

ZUNCKEL, continued from page 1
minimize soil disturbance, keep a living root in the ground year-round, diversify crop mixes and rotations and incorporate livestock.

These principles sound very familiar to Alliance members, and Zunckel's story offers proof that they are valid no matter what part of the world a farmer lives and farms.



Egon Zunckel

TOOPS, continued from page 1
action of factors such as the ratio of organic nitrogen to water soluble nitrogen, the availability of nutrients to soil microbes and the amount of air transfer in the soil.

Also, presently the cost of this advanced soil testing is higher, but he believes that, as with any new technology, over time the cost of biological testing will decrease and adoption increase.



Al Toops

SAVE THE DATE!

Winter Soil Health Meetings

Jan. 21 & Jan. 26, 2027

Quarryville & Mercer Co.

Stay in Touch

- Email: jhowes@pennag.com
- Visit: www.panotill.org
- Follow:  



ACT NOW!

**Application Deadline
August 31, 2026**

New Funding Opportunity for Planting Cover Crops in Pennsylvania.
Farmers for Soil Health is a new incentive program providing financial assistance to Pennsylvania producers for planting cover.

Program Eligibility

Producers of all experience levels are encouraged to apply — whether you are planting cover crops for the first time or have years of experience. Participants may receive \$35 per acre for planting eligible cover crops on up to 2,000 acres annually.

As part of the enrollment process, each participant is assigned a technical advisor. In Pennsylvania, technical assistance is provided through Sustainable Chesapeake. Advisors can assist with cover crop species selection, program eligibility, enrollment requirements, reporting, and overall program navigation.



The Cover Crop Selector Tool is also a useful resource to help compare cover crop options based on planting date, intended use, and management goals. For more information about how to use the tool visit Northwest Cover Crop Council's Cover Crop Selection Tool.



Please note that acres enrolled in Farmers for Soil Health cannot receive NRCS cover crop incentive payments for the same practice. However, Farmers for Soil Health payments may be combined with other eligible private or state-funded programs, such as Pennsylvania's Agricultural Conservation Assistance Program (ACAP).



Required Documentation

To complete the verification and enrollment process, producers should be prepared to provide:

- Social Security Number (SSN) or Employer Identification Number (EIN)
- USDA farm identifiers, including Farm Number, Tract Number, and Field Number
- Farm Service Agency (FSA) maps and field boundary information
- A completed W-9
- FSA Subsidiary Print
- FSA-156EZ
- CPA-52

Producers are encouraged to work with their local USDA Farm Service Agency (FSA) office to obtain the required documentation before beginning the application process.

Because funding is limited, producers are encouraged to apply early and gather the necessary documentation before beginning the enrollment process.

Enrollment Deadline

The application window for the 2026 enrollment period closes **August 31, 2026**.

Producers can apply through the program's online enrollment portal.



FARMER BENEFITS & INCENTIVES



**Per Acre,
Per Year**

Financial Incentive

Earn \$35 per acre to help offset the cost of implementing cover crops, regardless of your cover crop history.



Technical Advisor

Get on-the-ground support and educational resources from your local Technical Advisor to aid in the transition of your fields.



Flexible Commitment

Contracts can be renewed annually for the duration of the Farmers for Soil Health program.



Pennsylvania No-Till Alliance
2215 Forest Hills Dr., Suite 39
Harrisburg, PA 17112

Check us out:



Thank You to Our Sponsors & Supporters

*Support of Alliance activities by our annual sponsors is crucial to our ability to fulfill our mission and is much appreciated.
Thank you!*

Gold Sponsors • PA Department of Agriculture
• Stroud Water Research Center

Silver Sponsors • Melvin Weaver and Son • Hooper, Inc. • King's Agri Seeds
• Horizon Farm Credit • Agriteer • Ernst Conservation Seeds

Bronze Sponsors • Bayer US Crop Science • Fulton Bank • Hostetter Grain
• Univest Financial Corporation • Rosetree Consulting, LLC

Sponsors • Morrissey Insurance • Bottomline Ag Supply
• Ephrata National Bank • Meherrin Ag & Chemical
• AgXplore International • TeamAg, Inc. • LandPro Equipment
• Neudorff, USA • The Mill • PA Dairy Promotion
• Pine Creek Seed Farm • Alliance for Chesapeake • PASA
• Timac Agro • Soil Bound LLC

Farm Sponsors • Hershey Farms, LLC • Don Cotner Farm
• Criswell Ag Services • Future View Farm • Meyers Farm
• Schrack Farms • Slate Ridge Farm • Branton Farms
• Penn England Farms • Dennis Grimm

Media Sponsor • Lancaster Farming

Our Vision

"To restore the natural functions of agricultural lands, improve farm profitability and inspire the next generation of farmers."

*** **

Our Mission

To promote the successful application of no till, cover crops and other soil health principles through shared ideas, experiences, education and new technology, resulting in improvements in soil health, water quality, productivity, and profitability for future generations.

Need Some Advice?

Would you like guidance on setting up equipment or selecting a specific cropping system? We encourage you to contact any of the directors by scanning the QR code.

