On-Field Ohio
Rewriting Ohio’s Phosphorus Risk Index to keep nutrients and water on fields

Fifth-generation farmer Terry McClure knows the importance of water quality and uses best management practices on his 3,800-acre farm to lessen the potential for agricultural runoff into Ohio waterways. He’s opened his farm to Ohio Agricultural Research and Development Center researcher Elizabeth Dayton, who is in the midst of the three-year On-Field Ohio project, which seeks to revise the U.S. Department of Agriculture-Natural Resources Conservation Service Ohio Phosphorus (P) Risk Index to be more precise in predicting the risk of phosphorus moving off farm fields.

Dayton’s goal in the project is to make the P Index — used by farmers and applied in all nutrient management plans — more accurate by increasing management options to reduce phosphorus runoff, and to create a Web-based tool so farmers can easily calculate and manage their phosphorus runoff.

Some management practices being evaluated include tillage, soil type, fertilizer placement, soil phosphorus content, field topography, soil infiltration rate, drainage control structures and cover crops.

More: agcrops.osu.edu/

“...If you might be part of the problem, you should want to be part of the solution. While we don’t know what’s causing the issue, agriculture needs to understand what we can do to change it. If we are losing nutrients from our fields, we need to make changes so our farms benefit.”

— Terry McClure, owner of McClure Farms, Paulding County
Ohio Agricultural Research and Development Center

As the research arm of The Ohio State University’s College of Food, Agricultural, and Environmental Sciences (CFAES), the Ohio Agricultural Research and Development Center (OARDC) employs nearly 650 scientists and staff members throughout the state.

Its Wooster campus is the largest agbioscience research facility in the United States, and OARDC scientists work closely with researchers in Ohio State’s Colleges of Education and Human Ecology, Medicine, Public Health, Veterinary Medicine, Biological Sciences and Engineering.

At any given time, OARDC researchers are engaged in more than 400 research projects. Primary focus is in three signature areas:

• Advanced Bioenergy and Biobased Products
• Environmental Quality and Sustainability
• Food Security, Production and Human Health

The Ohio General Assembly established OARDC as the Ohio Agricultural Experiment Station in 1882. It is supported by a line-item appropriation from the Ohio General Assembly, competitive grants, gifts, contracts, federal grants and other sources. OARDC uses these funds to provide direct research support and economic development for Ohio’s annual $100+ billion agbioscience industry. OARDC is not funded by student tuition or any other general funds of The Ohio State University.

OARDC: A Leader in Agbioscience

ag•bi•o•sci•ence (ăg'bī'ō-sī'ens) n. the integration of scientific disciplines to address critical needs of food security, safety and health; environmental sustainability; and biobased energy, fuel and products

Food Security, Production, and Human Health

Environmental Quality and Sustainability

Advanced Bioenergy and Biobased Products