

OSU Extension is one of the ways the College of Food, Agricultural, and Environmental Sciences delivers on our land-grant mission, engaging Ohioans with the resources, research, and education necessary for success.

Extension agriculture and natural resources experts help Ohio farmers, landowners, and other citizens focus on profitable and sustainable agriculture, a clean environment, and proper stewardship of Ohio's natural resources.

By cultivating relationships with agriculturalists throughout the state, Extension professionals translate research they conduct into practices that help farmers increase farm profits via improved crop yields, better management of resources, and effective use of precision ag technologies.

Extension provides access to and insight on:

- ◆ Precision agriculture technology (facilitating data-driven decisions)
- ◆ New technology, software apps
- ◆ On-farm research — soil fertility, crop production, pest and disease management, weed management, nutrient management, product testing
- ◆ Alternative crop research and testing
- ◆ Monitoring and improving water quality
- ◆ Conservation education
- ◆ Preventing soil erosion, nutrient and pesticide runoff

Extension agriculture and natural resources professionals are often also certified crop advisers (CCAs); and many have an agronomy background, so interpreting research results can be handled in-house and right in the field.

One major goal is higher yields with less use of fertilizers and pesticides for improved water quality.

As Extension county educators and state specialists report on and translate research and test new methods, they provide resources, educational programs, field days, and hands-on workshops to share results.

Extension is an educational partnership that is funded cooperatively by USDA, state funding, and counties (most often with county commissioners). An Extension office in each of Ohio's 88 counties provides a local "front door" to Ohio State and CFAES expertise and resources.

Funding helps support projects such as the current \$5 million, five-year study in northwest Ohio's Maumee River watershed that is addressing phosphorus use and application methods to reduce runoff and other potential contributions to algal blooms in Lake Erie.

Soil and Water Conservation Districts (SWCDs) provide locally-driven solutions to natural resource concerns in rural and urban settings. This is handled via legislative advocacy, public outreach, grant support, training, and development programs.

SWCDs are comprised of trained technicians providing one-on-one assistance to urban and agricultural land users, specializing in soil erosion prevention, water management, and efforts to improve soil health and water quality.

SWCD and other professionals can survey and design grassed waterways, erosion control structures, surface and subsurface drainage, farm ponds, windbreaks, and livestock waste management facilities for landowners. Local SWCD staff can help design specific conservation practices and structures, including translating project specifications for contractors.

County SWCDs can provide specific assistance with:

- ◆ urban and rural water quality and erosion control
- ◆ conservation education
- ◆ land use planning
- ◆ forestry and wildlife management
- ◆ drainage information and design
- ◆ soil, floodplain, and aerial maps
- ◆ livestock waste management

Many SWCD offices have equipment for rent that might be cost-prohibitive for an individual to own. This includes no-till drills, minimum-tillage tools, and more newly-available nutrient management equipment. Trial use of unique equipment helps landowners see how they might incorporate such tools into their own annual crop and soil conservation routines. This, in turn, encourages use among farming peers throughout a county.

SWCDs also sponsor informational/educational programs – no-till field days, pond clinics, forestry and wildlife field days, teacher conservation workshops.

Each county SWCD is governed by a board of locally-elected officials who are familiar with the county's resource needs and can deliver a tailor-made conservation program.

The College of Food, Agricultural, and Environmental Sciences appreciates its continued collaboration with the Ohio Federation of Soil and Water Conservation Districts.



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES



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