ENHANCING AGRICULTURE AND THE ENVIRONMENT

• Approximately 25 county beef producers attended the three-session 2015 Ohio Beef School that was held via broadcast technology. The school provided producers across the state with education on various topics including the future of antibiotic use in cattle.

• OSU Extension and The Ohio Sheep Improvement sponsored the four-session 2015 Sheep and Goat Web Series. Fourteen producers from Knox and surrounding counties participated and learned how to reduce their losses in silage and hay programs, how to improve lambing and kidding percentages, and how to fine-tune animal health.

• Efforts to ensure that safe and wholesome foods are grown in Knox County and across the state continued by educating 27 individuals on good agricultural production practices through one county training. The area of focus this year was directed toward better recordkeeping, tracking produces and water quality/management.

• Knox County Extension, in partnership with the Knox County Parks District, started an Ohio Certified Volunteer Naturalist program. Late summer training was conducted for 15 new interns. Volunteers helped Extension share research-based information throughout the county by conducting workshops, assisting with citizen science activities and providing one-on-one consultations. Within the year, the interns completed 600 hours of volunteer work.

• An agriculture and natural resources intern created Gleaning Knox County to collect leftover crops from a harvested field and from fields where it is no longer profitable to harvest. The gleaned produce was then donated to local churches and food banks where it was distributed to those in need. From May through October, 3,254 pounds of produce were collected, and 1,324 food-insecure families were given produce. Of those, 610 had minors living in the home.

• Pesticides play an important role in crop production. Farmers wanting to apply restricted-use pesticides are licensed and required to receive recertification training every three years. Pesticide Applicator Training classes were offered to nearly 100 producers in Knox County. This year’s training classes focused on pest identification and using pesticides in a manner that is environmentally sound and economically feasible. Evaluations show that 91 percent have improved their pest identification knowledge, while 100 percent are more aware of pesticide safety practices.

• Fertilizer is an essential input in crop production. Ohio Law now requires farmers and commercial fertilizer applicators who apply fertilizer to 50 acres or more, to be certified by September 2017. These applicators must attend a two- or three-hour training session. More than 100 applicators attended one of two training classes in Knox County in 2015. This year’s training classes focused on applying nutrients in an economically feasible and agronomically and environmentally sound manner. Topics included water quality, proper soil sampling techniques, plant nutrient requirements, fertilizer sources, nutrient economics and calculating fertilizer recommendations.

• The 2014 USDA Farm Bill is significantly different than previous versions. This new legislation allows farms to update their program crop yields and to reallocate their farm base acreage. OSU Extension participated in a series of three meetings and individual consultations where more than 150 farmers learned the differences between the USDA programs Agricultural Risk Coverage (ARC) or Price Loss Coverage (PLC).

• Today’s soaring input prices have placed a greater emphasis on better input management. Many farmers are turning to technology to improve economic efficiencies. More than 200 farmers attended educational activities to increase their knowledge of precision ag technologies. Topics included data management, yield monitor operation, yield monitor calibration, the development of variable rate applications and drone applications. One hundred percent of those survey indicated that technology now plays a very important role in their daily farming operations.
• Each year, Knox County farmers estimate losing approximately 10 percent to 25 percent of their yields to pest-related problems. This equates to a loss of $12 million to more than $30 million annually. One hundred twenty-one farmers participated in educational activities aimed at reducing these losses. Topics included weed identification and control, herbicide injury symptoms, disease identification and control, insect identification and control, nutrient deficiency symptoms, proper scouting techniques, and economic thresholds. Farmers who attended these programs reported they expected to reduce their losses by 25 percent to 50 percent due to changes in their management practices. This equates to a savings of about $7.5 million to $15 million annually.

STRENGTHENING FAMILIES AND COMMUNITIES
• Two hundred seventy-five Mount Vernon High School and Knox County Career Center youth, 37 East Knox students, 50 Fredericktown students, and 280 eighth grade students from Mount Vernon Middle School completed the Real Money, Real World experience with data collected in a retrospective pre-post survey. The participants documented learning in a variety of areas related to money matters, family planning, education and planning for their future in the workforce.

PREPARING YOUTH FOR SUCCESS
• Through Knox County 4-H, 1,191 youth participated in 64 traditional community 4-H Clubs and activities, completing 2,020 4-H projects. They demonstrated a gain in life skills, public speaking, leadership and citizenship. The program was supported by 191 volunteers.
• Agriculture Awareness Day was open to all fourth grade students in the county on May 7. There were 24 fourth grade classrooms in attendance, with over 481 youth attending 20 different stations related to animals, plants, food-sourcing and the history of agriculture in Knox County. More than 50 volunteers coordinated the stations, and 25 Junior Fair Board youth served as group leaders.
• School enrichment experiences were presented to youth in five school districts. Go Plants was presented to two classrooms (41 youth); Rockets Away! was presented to five classrooms (135 youth); Weather Together was presented to one classroom (21 youth); Team Up for Good Nutrition was presented to one classroom (19 youth); Chose It! Use It! was presented to three classrooms (68 youth); and ChickQuest was presented to 18 classrooms (468 youth).
• Acres of Adventure is an after-school program held at St. Vincent De Paul School, providing 30 preschool through eighth grade students an introduction to the world of agriculture and life sciences through a two-part curriculum. Partners from OSU Extension and St. Vincent De Paul continued this one day each week during the 2014–2015 school year.
• Together with 37 campers and 10 counselors from Holmes County, 119 Knox County 4-H campers (ages 8 to 14) and 31 Knox County 4-H counselors (ages 14 to 18) attended the five-day 4-H Junior Camp at 4-H Camp Ohio. They participated in adventure activities, crafts, shooting sports, living history and nature studies. Eighty-eight percent of the survey respondents listed at least one thing they had learned at camp, and 72 percent listed at least one skill they had enhanced through their camp experience.
• After-school programming at East Knox (37 students), Mount Vernon (28) and Fredericktown (50 students) was conducted once each week utilizing STEM activities, crafts and team-building curricula. Before-school programming at Pleasant Street Elementary centered on nutrition and exercise for 60 students.