Ohio Grain Growers’ Nutrient Reduction Efforts

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Ohio Corn & Wheat
What are Ohio Farmer’s Doing?
Do you know a farmer?

Maybe not…

Farmers are only 1.5% of the population
How is Ohio Agriculture organized?
General Farm’s (1940s/50s)
Specialized Farm (1960s – today)
Timeline of Agricultural Organizations
Checkoffs v/s Associations
The job of a checkoff

- Increase demand for a commodity
- Increase profitability of farmers who grow that commodity
Job of the Associations

- Advocate for public policy favorable to a commodity
- Be the public voice for a commodity
What motivates a farmer?

- Values of God, Family and Country
- Independence, outdoors, working with family. (90% family farms in Ohio)
So if it’s such a great life why don’t more young people start farming?
Tale of Two Corns

Field Corn
- 88.2 million planted acres
- 12.5 billion bushels produced
- Crop Value: $65.2 billion

Sweet Corn
- 656,600 planted acres
- 166.3 million bushel equivalents
- Crop Value: $1.2 billion
Diversity of farmers

The Color of Equipment
Diversity of farmers

The Sign by the Road
Diversity of Farms

- Diversity in agriculture markets
  - (ethanol, livestock, exports, food,)
- Tillage (no till, conventional till)
  - Different soil, slope, rainfall
- Nutrients (manure or commercial fertilizer)
  One size does not fit all
USDA NRCS
Measuring Progress

- Study looking at the changes in conservation practice adoption on cultivated cropland acres
- Comparison between the 2003-2006 and 2012 data sets
- Published in 2016
NRCS Findings

- Acres with management for erosion increased from 34 to 54 percent of acres.
- Cropland acres managed with an edge-of-field trapping practice, such as a filter or buffer, increased from 18 to 31 percent of acres.
- Acres on which all nutrient applications were incorporated in some manner (knifed, tilled, or banded) increased.
- The percent of cropped acres on which nitrogen was incorporated at every application increased from 29 to 43 percent and on which phosphorus was incorporated at every application increased from 45 to 60 percent.
- About 71 percent of acres had a soil test within the last 5 years.
- GPS was used to map soil properties increased from 8 percent to 36 percent of cropland acres.
- The use of variable rate technology increased from 4 to 14 percent of cropland acres.
Phosphorus Application

Are farmers applying too much phosphorus?

- OSU research over entire state shows that soil test P levels trending down over past 25 years in 80% of 88 counties
- USDA research on Ohio fields showing that crops are removing more per acre than farmer is applying
  - Application = about 21 lbs P
  - Crop Removal = about 24 lbs P
  - Total runoff = about 1 lb P (surface and tile)
4R Nutrient Stewardship

**Ohio**
- 47 Certified Branch Facilities
- 2,890,000 Total Acres
- 6,000 Clients Serviced

**WLEB**
- 37 Certified Branch Facilities
- 1,900,000 Total Acres
- 3,580 Clients Serviced