



# 10-Minute Supervisor Trainings

Kentucky Soil and Water Conservation Commission

November 2014

## SOIL HEALTH

In the wake of renewed resurgence of dust storm activity in the west and the unpredictable weather patterns we're experiencing all across the country, it has become crucially important that we make a concerted effort to educate our landowners in the importance of healthy soils and how to achieve them. Many new advances have been made in the field of soil health and it is the job of the local conservation district to help landowners *Discover the Cover!* Choosing the right cover crop blend and appropriate planting times are crucial components of soil health. The beautiful thing about this method of farming is that your soils keep improving year after year.

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Soil Health is measured by biological, physical and chemical properties. It is imperative we farm in a way that addresses these properties. Tillage, for example, destroys the structure of the soil, while leaving a soil uncovered with no live roots growing destroys microbial habitat, reducing the amount of available nutrients and thereby affecting the biological and chemical properties. One of the best ways to reverse this process and restore healthy soil function is to implement a soil health cover cropping system that includes no-till and cover crop mixtures.

### Advantages of Soil Health Systems

#### Producers can expect:

- Better water infiltration
- Improved permeability
- Greater pore space
- Increased water holding capacity
- Better microbial habitat
- Greater nutrient cycling
- Increased soil organic matter
- Reduction/Elimination of commercial fertilizer and chemicals

### Rental Equipment

• Considering soil health systems which include no-till and cover cropping systems are not currently widespread, districts may want to purchase needed equipment for rental. Roller-crimpers and no-till seeders are sometimes needed to fully implement a soil health system and might not be economically feasible for small farmers to purchase.



## PLS Seed

Pure live seed mixtures are recommended for cover crop stands and are not always available through local venues. Districts might want to consider purchasing seed in bulk to re-sell to operators at cost much the same way many districts currently sell filter fabric.

## Research Plots

- Research Plots are an easy and relatively inexpensive way to educate local landowners in the advantages of soil health.
- Districts can partner with local landowners to plant cover crop mixtures for demonstration purposes.
- Consider doing soil health demonstrations in locations where you host field days.
- It's a good idea to place informational signs at the demonstration site to identify, promote and explain soil health projects.

## Funding Options:

- Soil Health Practices are available for cost share through the State Cost Share Environmental Grant Program, the Federal Environmental Quality Incentives Program as well as local cost share.

## Available Resources:

- NRCS has a series of educational posters available for digital and printed use. They can be found at [www.nrcs.usda.gov](http://www.nrcs.usda.gov).
- Soil Health specialists with NRCS and the Division of Conservation can also assist districts in writing soil health plans and recommending practices.

USDA IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER.

Healthy SOIL SECRETS

unlock the SECRETS IN THE SOIL

HEALTHY SOIL IS ACTIVE SOIL.

HEALTHY SOIL SHOULD NOT BE ALLOWED TO "REST" OR TO BE FALLOW. HAVING PLANTS GROW ALL THE TIME TO CAPTURE ENERGY AND FEED MICROBIAL POPULATIONS ACTUALLY HELPS IMPROVE SOIL HEALTH.

WANT MORE SOIL SECRETS?

CHECK OUT [WWW.NRCS.USDA.GOV](http://WWW.NRCS.USDA.GOV)