No-Till and Cover Crops in Southern Illinois

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- Average rainfall – 45.05 inches
- Rainfall peaks in May from June to Oct. about 3” per month
- Stay above 80 from mid May to Mid September
- Limited snow cover but still reach temperatures down to zero for short periods of time
Dahmer Farms, LLC

- Established in 1882
- 6\textsuperscript{th} Generation
- Farm with Father Terry, Brother John
- No-Till since 1981
- Cover Crops consecutively since 1999/2000
- 100\% acres covered since 2012
History presents opportunity for future
Realization

• Needed organic matter
• 1.5- 2%
• Cereal Rye
• About 12 years of 50% acres covered with cereal rye alone
• Increased O.M. to 3.5- 4%
• PROTECT OUR SOIL!!
Covers crops used

- Cereal Rye
- Hairy Vetch
- Annual Ryegrass
- Rapeseed
- Clovers
- Oats
Cereal Rye
Cereal Rye

- Maximum growth above and below soil surface
- 4.5’-5.5’ growth, over 36” in depth
- Blanket the soil is a must for erosion and biological activity at soil surface
- Weed suppression is achieved when you blanket the soil
- Carry nitrogen forward 12-15 months
- Mulch helps keep soil temps cool for corn the following year
- Small roots start to die at 80 degrees
Annual Ryegrass

- Started in 2012
- Needed a cover crop ahead of corn
- Works great ahead of corn
- Establishment issues
Educational Experiences

• Pay attention to what your cover crops are telling you
Figure out what tools work best for you

- On farm testing is the only way to determine what will help you succeed
Know when enough is enough

• Too much growth can be achieved if fertility program is not taken into account
Cereal Rye and Hairy Vetch

- 70# Cereal Rye 6# Hairy Vetch Raw
Rapeseed stakes its place in our mixes
Too much of a good thing is a BAD THING!
Cereal Rye and Hairy Vetch

- 20# Cereal Rye, 18# Hairy Vetch
Options
Buckwheat
For every action there is a reaction
Soil cores provide snap shots of soil profile

- 12 years after ripping and continuous no-till
Educational Experiences

• Pay attention to things that don’t turn out like you thought they would.
• Work with knowledgeable trades people not sales people, everyone must be on board with your program
• Pay attention to how your equipment is set up
• Failure is only achieved when nothing is taken from the experience
HONESTY

- Your location in the United States
- Your farm system
- You can’t replicate the exact program that speakers talk about and expect the same results
- Mindset is the only way to succeed
Thank You