Dan Perkins: Certified Crop Advisor
Watershed and Conservation Program Specialist

www.iroquoiswatershed.org

www.jaspercountyswcd.org

JCSWCD “Cover Crop Guy” You tube Channel

Cover Crops
How can you help blanket the watershed?

Practical Challenges and Solutions for Watershed Managers
651 sq. miles
438,332 acres
84% Ag land
6% Forested land
10% Other/Urban Land
208 miles of streams
Potential relative reductions in nitrate leaching in Corn Belt for specific corn/soybean mgt. changes

<table>
<thead>
<tr>
<th>PRACTICE</th>
<th>CHANGE</th>
<th>REDUCTION POTENTIAL</th>
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<tbody>
<tr>
<td>N rate on corn</td>
<td>150 reduced to 125 lb/ac</td>
<td></td>
</tr>
<tr>
<td>timing</td>
<td>no fall N-fertilizer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>applications</td>
<td></td>
</tr>
<tr>
<td>cropping</td>
<td>switch to perennials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>combine cash crop with cover crops</td>
<td></td>
</tr>
<tr>
<td>buffer strips</td>
<td>1-5% of area</td>
<td></td>
</tr>
<tr>
<td>tillage</td>
<td>plow to long-term, continuous no-till</td>
<td></td>
</tr>
<tr>
<td>wetlands</td>
<td>1-5% of area</td>
<td></td>
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Source: Dr. Gruver WIU
Cover Crops

• How to get message out?
  – Map it.
  – Gather them. Go to them.
  – Let them sell it.
  – Repeat.
Map it.

• Where are cover crops currently being used?
  – SWCD Boards and Staff, Extension staff, NRCS staff, FSA staff, DNR staff
  – Find the current practicing farmers . . .
    • Fall Transect being done across state right now.
    • Local Ag business:
      – List them: CERES, Co-Alliance, Wilson Fertilizers, Vision Ag, Independent CCAs, etc.
        » Are they favorable to cc? Why or why not?
        » What questions do they have? Concerns?
        » Which staff are supportive?
    • When do they have their customer/sales appreciation days?
      – Go to them and be social.

• List your locally available experts . . .
  – Private, Non-profit, governmental . . .
Do cover crops work in Iroquois Watershed? (2010)

YES

What cover crops in what rotations?
How much benefit?
Economic benefit?
What cover crops?

Figure 8. In the Midwestern United States, winter cereals, brassicas and annual grasses are all quite popular as cover crops.
Gather them. Go to them.

Gather . . .
• Tillage Roundtable Groups
• Your own Workshops
• Demonstration Plots

Go to . . .
• Cover Crop and Soil Digs
• Planter Ride Along
• Combine Ride Along
• PARP/Customer Meetings
• “Coffee Shop Locations”
Tillage Roundtable

GOALS
1. To improve our conservation tillage systems and farm profitability
2. To encourage the adoption of conservation till methods in the area

METHODS
1. Meet 3-4 times a year
2. Network Exchange
3. Planter Clinic
4. Farm Visits

SIZE
10-15 Participating Farmers
- Farmers in the group practice
  Conventional Till to 100% No-Till

Figure 5. Respondents who plant cover crops employ a wide variety of tillage strategies.
**Current list of topics:**
- Drainage and No-Till Methods
- Deep Ripping or Worms
- Cover Crops: Herbicides & Set-backs
- Precision Technologies and Role in No-Till setup
- Do’s and Don’ts of No-Till
- Jasper County No-Till Stories
- Role of Compaction in No-Till Systems
- Farm Shop Meetings to Investigate Planter set ups
- Precision Technologies and Role in No-Till setup

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**Typical Agenda Example**

Wednesday, November 30, 2011  
Devon’s Family Restaurant, Rensselaer In  
1. 7:15-7:30 am arrive and have breakfast  
2. Dan Perkins: Cover Crop Fall 2011 Update and Soil Pits Report  
3. Local Farmer will talk about his farm operation, successes, failures, and questions  
4. Question and Answer Time  
5. Discussion: Barriers to conservation tillage use in this area? How do we change these?  
6. Next meeting date, farmer to present and topic covered
East of Kentland, Indiana
Loam Soil
Conventional Till after Seed Corn
April 22, 2014

#1 - Check strips like this one can provide insight to the benefits of cover crops in just one season.

71-73 soybean yield with no cover crop
75+ soybean yield after Cereal Rye
No marestail = one less post spray
Beans where greener two weeks longer
No white mold in beans after cereal rye

#2 - Differences in soil, 10 ft. apart, after just one season.
Your own Workshops

• Feed em
  – Breakfast, Lunch, 2 hours max seems to work best . . .
  – Spread throughout watershed = social networks- “more than 20 miles your the expert”
  – Farmer Panel or bring a farmer.
• Relevant: Bring in experts, partnerships . . .
• Listen – “Clickers”, pre-post surveys, etc.
• Don’t power point to death. Let them mingle.
  – Have equipment, stuff to look at.
  – Flip Chart activity
• Timing
  – August
  – Early December
  – Not Feb
  – March
  – Not April, May, June
Demonstration Plots

• Barry Fisher NRCS has sample layout
• Seed companies will provide seed and layouts
  – Just ask.
• Try just spinning some seed along the edge of a field.
• Drilled after wheat
  – Early August for dramatic effect
  – Early September to simulate aerial seeding
Large and Small Demo Plots
Cover Crop and Soil Dig

Start small...

Are cover crops worth it?

Come to a field day and hear from farmers and experts about cover crops.

See the cover crop in the field, hear from the farmer person.

Contact us for exact location:
- Dan Perkins: Jasper County
- Rose Morgan: Newton
- Bryan Overstreet: 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Date</th>
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<tbody>
<tr>
<td>10 am</td>
<td>Tuesday, Nov 15</td>
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<tr>
<td>1:30 pm</td>
<td>Tuesday, Nov 15</td>
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<tr>
<td>9:30 am</td>
<td>Wed, Nov 16</td>
</tr>
<tr>
<td>11:00 am</td>
<td>Wed, Nov 16</td>
</tr>
<tr>
<td>1:30 pm</td>
<td>Wed, Nov 16</td>
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</tbody>
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Soil pit at each site weather permitting. 

Key:
- Soil Pit Number
Cover Crop and Soil Digs

• Target
  1. First time cover crop users.
  2. Long term users

• Timing
  – Fall Pits: First to second week in November
  – Spring Pits: End of March to early April
  – Sponsors are listed to make use of their customer contacts.
  – 3 Pits in morning and 3 in afternoon works well.

• Farmer or Ag Company/Sponsor to dig pit.
  – 5 minutes before field visit is best.
  – Off end row- although compaction shows nicely.
  – Good established cover crop portion of field

• Dig pit no deeper than 4 feet.

• 1 hour at pit on nice day,

• 15 minutes if cold, have shop to go to visit.
  – Have large pictures of key concepts
  – Flip Charts for discussion
After:

i) What?
ii) Why?
iii) When?
iv) Cost?
v) CC Termina
vi) Next Cas
Planter/Combine Ride Along

• Literally drive the country side at planting and harvest time.
  – Start with known farmers to get a feel for it.
  – Get referral if you can, make it convenient.
• Bring a small cooler with drinks and some snacks.
• Learn and ride and have a conversation.
PARP/Customer Meetings

• Extensions holds multiple meetings
  – Winter PARP meetings, etc.
  – Get invited, even if it is a 5 minute slot.

• Ag Businesses hold multiple meetings
  – Customer Appreciations
  – New Product Meetings
  – Often they are looking for a “non-sales” topic.
  – Field Days combine efforts
Social Media - use it, but make sure it is used.

• Cover Crop — You Tube Channel
  • 83+ Videos
  • 27,000 views since Feb 2012
  • 8,529 views in 2013
  • 8,851 views since Jan 2014
  • 400-900 views per video
Reports

• Annual Cover Crop Stories
• This becomes your summary record.
• Key stories to tell.
• Pdf available for download.
Figure 28. Time/labor was the top barrier for non-users of cover crops, followed by concerns over making good choices of cover crop species.
Figure 32. Like cover crop users, non-users rate personal experimentation highest when assessing learning opportunities.
Let them sell it.

Nov 2, 2010: North of Demotte, IN.

The value of digging a soil pit was made evident, after seeing 24 inches of root depth into and through compacted layers by late fall.

Farmer quote: “I ripped and used cover crop and had spots I just ripped. The cover crop and ripping had no ponding, where as the just ripped parts of the field did have ponding. I was sold on cover crops!”
Resources

- [www.mccc.msu.edu](http://www.mccc.msu.edu)
- [www.plantcovercrops.com](http://www.plantcovercrops.com)
- [www.covercrops.msu.edu](http://www.covercrops.msu.edu)
- JCSWCD “Cover Crop Guy” You tube Channel
Questions

“How societies fare in the long run depends on how they treat their soils and water. Simple. Concise. You are your water and dirt.”

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219-869-5831