Termination Methods

- Winterkill
- Herbicides
- Mowing
- Rolling
- Tilling
2 most important Questions to ask:
#1: What are you trying to accomplish?
#2: When is your planting window?
Cover Crop Termination

Planning ahead is important!
Treat Cover Crops Like Cash Crops!
Rolling cover crops
Rolling cover crops
Rolling Triticale/Vetch
*Tillage Radish® was also in this blend
Don’t let this happen to you!
No Till/Cover Crop Pumpkins
Dawn Equipment- Cover Crop Roller
Successful Cover Cropping is the Sum of all the Parts
Radish and oats winterkilled
When is the Nitrogen released?

Nitrogen Storage Tanks
Lester Farms- KY
N and S availability

Fall Cover Crop
- Forage radish
- No cover
- Oat
- Radish/Oat

Wye REC 2012
Upper 20-30 cm soil
Spring till plots excluded.

Nitrate-N, mg/kg

Date
2.1.12
2.24.12
3.18.12
4.8.12
5.7.12
5.28.12

Sulfate-S, mg/kg

Date
2.1.12
2.24.12
3.18.12
4.8.12
5.7.12
5.28.12

Fall Cover Crop
- Forage radish
- No cover
- Oat
- Radish/Oat

Wye REC Soil
Upper 20-30 cm
Spring tilled plots excluded.
Release of N from Tillage Radish®
What about planting into green covers?
What about planting into green covers?

- Increasing in popularity in the Northeast
- Allows covers to maximize potential
- Holds off slugs
- Crop Insurance implications?
- Requires careful management
  - Moisture
- Equipment modifications?
Cereal Rye

- Alleopathy

- Nitrogen management
  - Assume no available N available at planting
  - Will be released later depending on maturity of cereal rye at termination

- Moisture management
  - Do not control cereal rye unless you are ready to plant if wet.
  - Control cereal rye early if dry and no rain in sight
What’s the ppm of nitrates…

…coming out of your tile lines or running off your fields??
Moisture management

May

June
### Results: Corn Planted Behind Cover Crops

No (Zero) N Added at Planting

<table>
<thead>
<tr>
<th>Cover Crops and Blends Tested</th>
<th>Corn, Bushels Per Acre (b/a) Yield</th>
<th>Zero N Added 5-31-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crimson Clover, Austrian Winter Peas, Hairy Vetch</td>
<td>90 100 110 120 130 140 150 160</td>
<td>151.55</td>
</tr>
<tr>
<td>Subterranean Clover/Hairy Vetch</td>
<td></td>
<td>144.56</td>
</tr>
<tr>
<td>Control (only plot with N added, 75 lb/a)</td>
<td></td>
<td>99.08</td>
</tr>
<tr>
<td>Austrian Winter Pea</td>
<td></td>
<td>144.92</td>
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<tr>
<td>Yellow Blossom Sweet Clover/Hairy Vetch</td>
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<td>142.85</td>
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<tr>
<td>Crimson Clover</td>
<td></td>
<td>124.18</td>
</tr>
<tr>
<td>Hairy Vetch</td>
<td></td>
<td>152.36</td>
</tr>
</tbody>
</table>

Average Corn Yield From Cover Crop Plots: **143.40 b/a**

Increase Over Control: **44.32 b/a**
What about crop insurance?

- Big strides made in the past 2 years for RMA, FSA, and the NRCS to cooperate on this issue
- National Wildlife Federation was a big help!
- Need to check with the local agent
- Can cover crops be used AS your crop insurance?
  - Well managed cover crops can mitigate weather extremes
Other considerations

- Weeds that are present in the cover crop
- If weed suppression is a primary objective of the cover crop, you need to increase the seeding rate by up to 50% over suggested rate for use as a cover crop
Timing of termination

- Soil moisture
  - Dry
  - Wet
- Cover crop maturity
  - N Production
  - Biomass production
- Nutrient capture and release
- Succeeding cash crop
- Planting green
- Crop insurance considerations
The Secret to Success!

Treat Cover Crops Like Cash Crops!