# Seed, Selection, Mixtures, and Establishment

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## A quote to consider...

"The Cover Crop Seed Industry resembles the Wild, Wild West - almost anything goes!" - Don Robison, Indiana farmer and seedsman for nearly 30 years

### Why would Don say that?

- A number of unsubstantiated claims/promises about product performance
- VNS seed that turned out to be "Very Nasty Stuff"

The good news? It is not necessarily true...

• The bad news? It IS sometimes true...

#### Seed Supply

- Cover Crops are gaining in popularity
- Cover Crop seed production areas are expanding
  - Western Canada
  - Northwestern USA
  - Australia & New Zealand
  - Europe
  - Upper Midwest/Plains states USA



#### Seed Supply

- Production from traditional production areas have expensive competition
  - Wheat and other cereal grains
    - Wheat in Western US ~ \$7 USD/bu
      - Yields ~90-150 bu./acre (~\$840 gross/acre)
  - Corn growing in non-traditional areas
    - Outstanding net profits in past two years
  - Soybeans gain popularity
    - Outstanding net profits in past two years

### Seed Supply - is help on the way?

- Producers in other areas are attempting to produce seed to use as a cover crop
  - Missouri (Crimson Clover, Winter Rye, Oats, Annual Ryegrass)
  - Illinois/ Indiana (Winter Rye, Oats, Annual Ryegrass, Radishes, Hairy Vetch, Barley)
  - lowa/Wisconsin/Minnesota/Michigan (Winter Rye, Oats, Peas, Radishes, etc...)
  - North and South Dakota (Radishes, Winter Rye, Oats, Rape,
     Turnips, etc...)

## Growing Seed for Cover Crops-Concerns

- Several varieties are PVP'd
  - Against the law to reproduce and sell
  - Is selling seed worth the risk of getting caught?
- For the buyer of locally grown seed...
  - Is the seed clean, tested, and is there a guarantee of seed quality?
  - Did the local grower use proper production protocol?
  - Is "cheap seed" worth a risk?
  - Is "cheap seed" really "cheap"?

### No good deals on cheap seed...



Farmer "saved" 50¢/# on cheap seed {\$2.50/acre} (left) and now has a "disaster" on his hands! Good radishes on right cost a bit more but have the tubers farmers want.



#### Seed Supply- Best Choice

- Purchase from a reliable source
- Work with seedsmen you trust
- Attain a seed test from your supplier
  - Seed tag
  - Seed test (if you are a Seed Dealer/Distributor)

#### Seed Supply-Supply Issues

 Some cover crop species will be short and/or hard to get into the Midwest by planting time

- Crimson Clover increased price and tight supply
- Annual Ryegrass shipped ASAP after harvest
- Winter Cereal Rye Shipped ASAP after harvest

#### Seed Selection

- Choose species that work reliably well in your region
  - Conduct local, on-farm trials
  - Network with fellow producers
    - Try new species on a small scale





#### Seed Selection

#### Set goals for your farm

- Do you want to produce Nitrogen?
- Do you want to scavenge Nitrogen?
- Do you need to reduce compaction?
- What crop are you following and in advance of?
- How will you apply the cover crop?
- How are you going to terminate the cover crop?
- What are you willing to spend per acre to achieve benefits?

# Do you need feed?



#### Do you want to produce N?

- Legumes
  - After a cereal crop -works very well in all regions
  - Have been tested and shown to produce over
     140#/Acre after wheat (Crimson Clover-Kladivko)
  - Also help build soil organic matter
  - Also help to reduce compaction



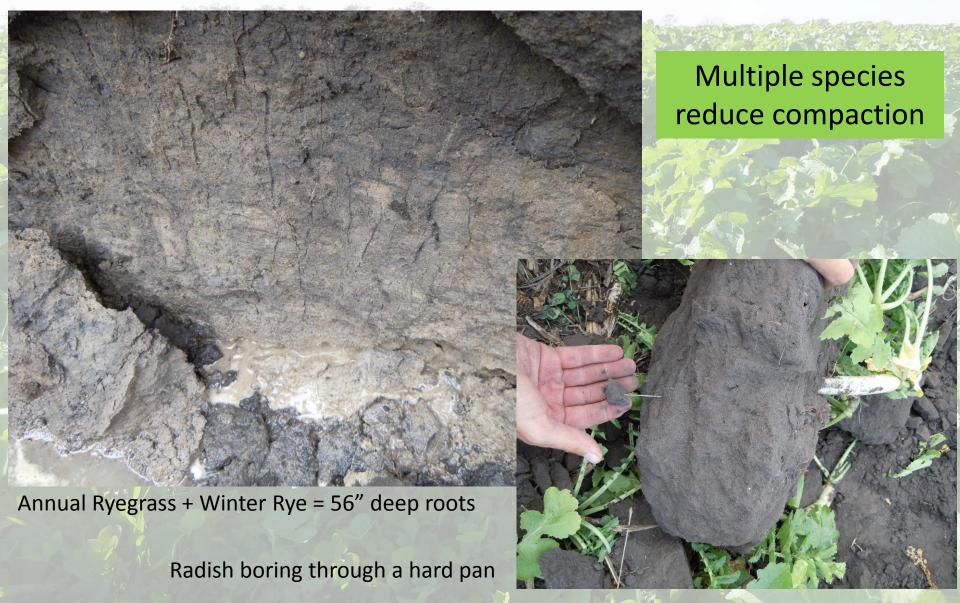


### Do you want to Scavenge N?

- Annual Ryegrass, Brassicas, and Radishes top the list in the ability to scavenge
- Cereal grains are "good scavengers" as well



#### Do you want to reduce compaction?



#### **Cover Crop Mixtures**

- Chose Region Specific Mixes
- Plant Mixtures that help you accomplish your goals
  - Goals may change from field to field
  - Mixtures may be different in each field





#### **Cover Crop Mixtures**

- When staring out use "KISS"
  - Oats and Radishes after a cereal grain or early harvested vegetable crop
- Have realistic goals and "Taylor make" your mix to fit your goals



#### **Cover Crop Mixtures**

- As you become more comfortable with cover crops you should possibly expand your use of different mixes and species
  - Be confident you can terminate the cover crop
  - Reach goals previously unmet
  - Look for mixes that work in your region and meet your needs

## **Establishing Cover Crops**



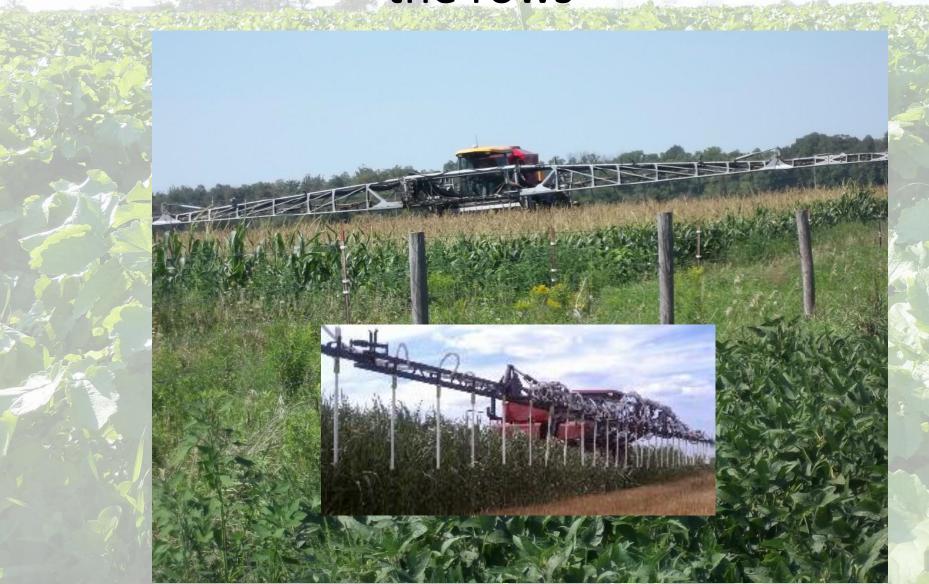
## Drilling or Planting – the best stand



# Planting in 15" rows



# Establishing Cover Crops – Between the rows



## **Aerial Application**







#### Corn

- Dried up to ear
- 50% sunlight to ground
- Keys include
  - Moisture
  - Herbicide program
  - Species that workwith aerial application



# A note from Iowa about aerial application

 Pushing radishes with aerial seeding into a dense, dark corn or soybean canopy is unsuccessful. Once we get some new equipment, like detasselers, then we can see if there is more light into the corn canopy, for example, to improve aerial seeding establishment. – Sarah Carlson PFI

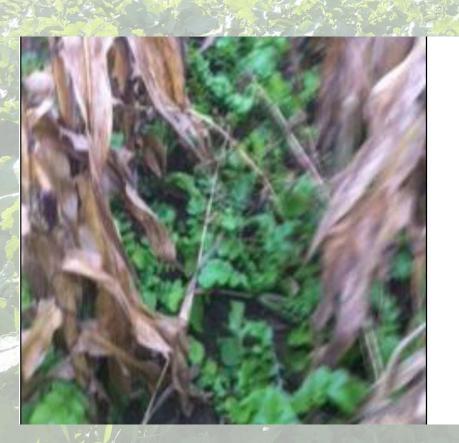
# Planting at "lay-by"



Ontario - Planting at "lay-by"Andy McNiven



## Cambridge, Ontario – Planting Radishes at "lay-by"





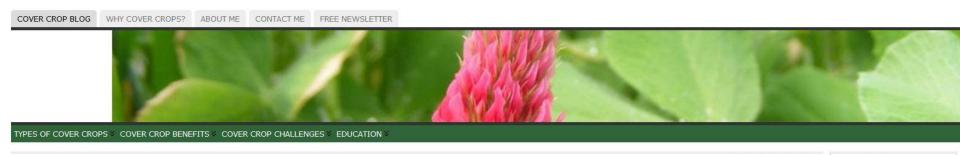




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#### PLANT COVER CROPS

Learning about the benefits of planting cover crops.



Older Entries »

#### Hallelujah - New RMA ruling provides a BIG boost for cover crop users and Agriculture

BY DAVE, ON DECEMBER 1ST, 2011

The Risk Management Agency ruled today to change their policy on cover crop usage and cash crops that follow cover crops. In a previous post I reported some limitations that the RMA had on following cover crops (cover crops could not be headed out, could not be harvested before planting cash crop, etc...).

This good news was . . . → Read More: Hallelujah – New RMA ruling provides a BIG boost for cover crop users and Agriculture

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#### When to apply cover crops into soybeans

BY DAVE, ON NOVEMBER 30TH, 2011



For some time I have promoted aerial applying cover crops into standing cash crops. We have a pretty definitive maturity set for corn when it comes to aerial application.

But there is some question of when to fly cover crops into soybeans. The range of discussion on this topic usually goes from 50% yellow leaf to

#### CATEGORIES

- Cover Crop Benefits (28)
  - Breaking Up
     Compaction (10)
    - Cover Crop Roots
       (10)
  - Fall Grazing (1)
  - Grazing Cover Crops (1)
  - Higher Yields (13)
  - Nitrogen from Cover Crops (8)
  - Planting Radish with Wheat (1)
- Lower Inputs (4)
- Manure management
   (2)
  - Slurry Seeding Cover Crops (1)
- Soil Improvement (9)
- Cover Crops and Earthworms (5)
- Weed Suppression (2)
- Cover Crop Challenges

#### **Plant Cover Crops**

Learning about the benefits of planting cover crops.



- Agronomic information on cover crops
- Non-seed company related
  - -Hopefully unbiased ©
- E-mail support to over 1,500 farmers in 2012

# Thanks!

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