COVER CROPS

Cover Crop

- Grasses, legumes, forbs, or other herbaceous plants established for seasonal cover and other conservation purposes.

Cover Crop Purposes:

- Reduce wind and water erosion
- Increase soil organic matter
- Manage excess nutrients
- Promote nitrogen fixation
- Increase biodiversity
- Weed suppression
- Provide supplemental forage
- Manage soil moisture
- Minimize soil compaction
- Improve infiltration, aeration & soil tilth

Seed legumes & grasses when?

- Spring…..early as possible (friable soil) and prior to June 1
- Late Summer
- North=risky
- Central=July 15-August 15
- South=August 1-September 1
- Mix of all grass:
- Spring through late summer and not after

South=September 1

Central=September 15

Cover Crop Seed Mixtures

- Oats…….1 to 2 Bushels per acres
- Cereal Rye….1 to 1 ½ Bushels/acre
- Winter Wheat…1 bushel/acre
- Annual Ryegrass….15 lbs per acre

Green Manure Crops

- Alfalfa (not for wet sites)….12-15 lbs/acre
- Buckwheat…….35-40 lbs/acre
- Sudangrass……..25-30 lbs/acre
- Red Clover……3-10 lbs/acre
- OK on poorly drained sites

Cover Crop Technology

- Species Matters (amount of OM)
- Time Cover Crop is present in field matters
  - Plant Early and Don’t till when planting
- Time Cover Crop is killed matters
  - Late – maximize moisture uptake; maximize nitrogen fixation
  - Early – minimize moisture uptake; ease of planting in residue

No Tillage into Cover Crop Maximizes it's Value

What should I know about Cover Crops and RUSLE2?

RUSLE2 Version 1.26.6.4 (Nov 13 2006)

File Database Edit View Options Tools Window Help

Auto update

Worksheet: Dane*

Tract # **Tract number**
Owner name **Owner name**
Field name **Field number**

Info

Compare management alternatives for a single hillslope profile

Location USA\Wisconsin\Dane County
Soil Dane WI\DnC2 Dodge silt loam, 6 to 12 percent slopes, eroded\Dodge silt loam 100%
Slope length (along slop 150
Avg. slope steepness, % 8.0

T value, t/ac/yr 5.0

Management alternative table

Temp. scenario	Management	Yield values	Residue values	Contouring	Cons. plan. soil loss, t/ac/yr	Sed. delivery, t/ac/yr	Cover values	Soil conditioning index (SCI)	Soil conditioning index (SCI)	STIR value
Profile	...p\corn grain;FC, twist, disk, fcult, Soybeans NT Contour	Yields	... inputs	...rade 0.5 percent	5.2	5.2	.... cover	...g index	0.18	48.1
Profile	...in;FC, twist, disk, fcult, Cereal Rye NT,Soybeans NT#4	Yields	... inputs	...rade 0.5 percent	2.6	2.6	.... cover	...g index	0.58	51.3
Profile	..., twist, disk, fcult, Cereal Rye NT,Soybeans NTcontour	Yields	... inputs	...rade 0.5 percent	4.3	4.3	.... cover	...g index	0.22	51.3
Profile	default	Yields	... inputs	... up-and-down hill	30	30	.... cover	...g index	-2.2	0.150
Profile	default	Yields	... inputs	... up-and-down hill	30	30	.... cover	...g index	-2.2	0.150
Profile	default	Yields	... inputs	... up-and-down hill	30	30	.... cover	...g index	-2.2	0.150

1. Corn Grain-Soybeans no Cover Crop
2. Corn Silage-Cereal Rye-Soybeans
3. Corn Grain-Cereal Rye-Soybeans

Finished calculating

R2_NRCS_Sta_Agron ... SCI and Fuel Use110206 mose

RUSLE2 Cover Crop Values

- **Erosion Rate "T Value"**
- **Soil Condition Index Value***
- **Soil Tillage Index Rating**

1.) Tillage prior to planting offsets value of cover crop

2.) Late summer/fall planting doesn't provide spring protection..minimizes value of cover crop

QUESTIONS or COMMENTS?

Cover Crop Value

EQIP

- CROPLAND
- WILDLIFE AREAS
- ORCHARDS
- VINEYARDS
- SMALL FRUIT AREAS

EQIP PAYMENT:

- $18.50 per acre
- One year practice life
- Maximum three year participation

•Cost sharing for establishment
•Must meet the needs of a resource concern