Grazing Cover Crops

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Why Consider Cover Crops?

Making dry hay will cost $100 - $115/ton in 2013  

So why not double crop & turn stubble fields into feed?
Also to Improve Soil Productivity

**Long Term Benefits**
- Reduces soil erosion
- Increases rainfall infiltration
- Increases soil organic matter (ND trial went from 3% to 11% in eight years)
- Shades the soil reducing surface soil temps, water evaporation, & increase soil organisms in soil surface
- Can mine nutrients from deep down in sub soil
North Dakota Practices

- Grazing animal is the key
- Strictly no till – why build organic matter then destroy it with tillage!
- Make it work with all grain rotations
- Gabe Brown Farm has reduced pesticide and commercial fertilizer use by 75% in eighteen years

- After wheat harvest will no till – hairy vetch, triticale, turnip, clover in Aug. & graze 1-2X from Oct – Jan & 1-2X from April – June; then in early July spray and no till a warm season cover of a brown mid rib corn or sorghum, hybrid millet, soybean, sunflower, tillage radish & hairy vetch, graze 1-2X Oct – Jan.

- If pasture desired add a pasture mix to the warm season mix, otherwise no till grain the next summer
Gabe Brown Recommendations

- The more plant species in the mix the better – he had one field with 70!
- No till the mix to a soil depth ¾ - 1” deep
- Set the drill seed cup opener to the opening for the largest seed in the mix & set the seeding rate for that seed rate for the total lbs/acre you desire
- Cattle should graze 1/3, trample 1/3 & leave 1/3 standing for winter cover and/or regrowth
- He plants a few species that animals will not graze like safflower
- Says North Dakota mixes may not work for other States, experiment & don’t be afraid to fail a few times
Oats as a Fall Forage Crop

- No till into wheat stubble, aerial seed into standing corn, etc.
- Seed alone or mixed with turnips, forage radish, millet, etc.
- Plant mid July – mid Aug.
- For grazing, baleage, green-chop
- 9 – 13% CP, 52 – 58% TDN
- 2 – 3.5 ton/acre of DM

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Cocktail Annual Mixes for Grazing

- The planting of a mix of annuals in July that have a synergistic growth affect on each other
- North Dakota State University trials found the following mix to be the best for yield & animal performance: 0.75 lb. of Pasja turnips, 1 lb. of oilseed radish, 15 lbs. of oats and 4 lbs. of foxtail millet
How to Figure Out Seeding Rates

• Set a budget $/acre
• Decide how many plant species you want in mix, is it for grazing, nitrogen production, soil compaction, springtime growth, etc.
• If you want a 5 way mix take the single seeding rate of each plant species and divide it by 5; i.e. oats single seeding rate is 64 – 80 lbs/acre so divided by 5 = 12 – 16 lbs/acre & red clover is 8 – 12 divided by 5 = 2 – 3 lbs/acre, etc.
“AND JUSTICE FOR ALL”
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