Cover Crops and Cattlemen

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Steps to Soil Health

- Least disturbance
- Cover/litter
- Diversity
- Active roots
- Livestock
Resource Concerns

Soil Protection
  water wind erosion

Soil Structure
  Aggregate stability/bulk density

Soil Fertility
  Organic matter/microbial life

Water Management
  infiltration – use – salinity

Wildlife Enhancement
  habitat/food

Cattle Feed
  cost competitive/performance
Cow Feeding Costs

Summer Pasture
$25-35/AUM = $.83 to $1.16/day

Stalk/Aftermath Grazing
$15/AUM + Supplement = $.67/day

Winter Hay
40lbs x $.03/lb + yardage = $1.45/day

Annuals for Grazing
land 50
spray 10
seed 40
fence, fertilizer, opportunity ??

Total Cost $50 - 100/acre+
Breakeven relay crop 33-44 days
Breakeven primary crop 66-88 days
Cover Cropping Opportunities

**Full Season** – planted in late spring/early summer as primary use

Diversity - warm season grasses – sudan, sorghum, millet, corn
  - warm season broadleaves – soybean, sunflower, sun hemp, cowpeas
  - cool season grasses – winter cereals, annual ryegrass, oats, barley
  - cool season broadleaves – peas, clovers, radishes, turnips, vetch

Use - late summer, fall, winter grazing - potential swath graze or hay
  - 3000-8000 lb production

Limitation - competing with cash crop, late graze cereals with grain set, frost and freeze precautions, quality
  - “no brainer” for cattlemen on PP with fence(able) acres
Cover Cropping Opportunities

**Fall Seeded Winter Annuals** – Seeded early fall post harvest for next season use

Diversity – winter cereals – rye, triticale, wheat

biennial legume – hairy vetch, sweet clover

Uses – very limited fall grazing, spring pasture, hay or haylage, followed by a second forage/cover crop 4000-6000 lb production

Limitations- drop in quality with cereal heading, high production in short window, competes with cash grain crops

facilitates latter turnout on native pastures, high quality lactation ration
Cover Cropping Opportunities

**Fall Relay** – seeded post harvest in early fall following early harvested crop as hay, barley peas, canola

Diversity – cool seasons grasses – late maturing oat, barley, winter cereal, annual rye grass

- brassicas – turnip, radish, canola, sugar beet
- cool season legume – peas, lentils, crimson red clover

Use – extended fall early winter grazing production highly variable 0 to 5000 lbs

Limitations – short growing period with emergence dependent on fall moisture, immediate at harvest

- extends growing season with high quality feed for late weaned cows
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Beauty of Brassicas
Limitations of Warm Season Grasses
Swath Grazing an Option
Corn Grazing an Option
Animal Performance

![Graph showing animal performance over years with categories Millet, Turnip, Cocktail, and Native. The years are 2007, 2008, 2009, 2010, and 2011.]

![Image of cattle grazing in a field.]
Grazing Efficiency ?
Some Animal Health concerns and Risks
Diversity vs Monoculture
Crop Choices
A Seeding Mix
Other

Volunteers and weeds going to seed
Herbicide residual
Planting depth - establishment
“pugging” and compaction
Excessive residue for planting
Seed cost and availability
Crop insurance regulations
Cover cropping can provide agronomic and soil benefits. The biomass produced can both feed the soil and cattle.

Cover cropping and livestock go together. It’s a win-win for cattlemen.