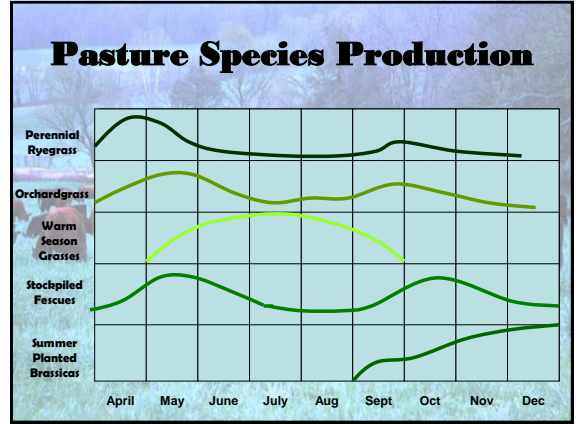


Pasture Forage Species: Annuals

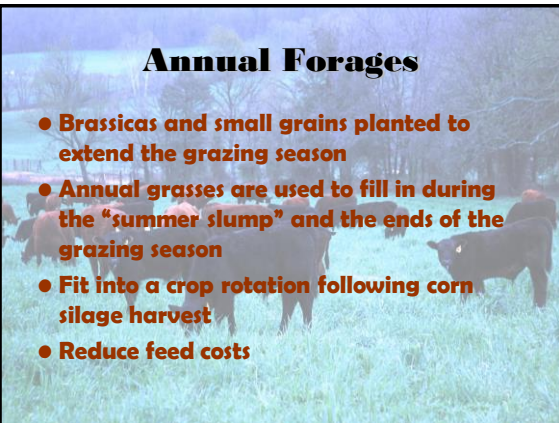
Mat Haan
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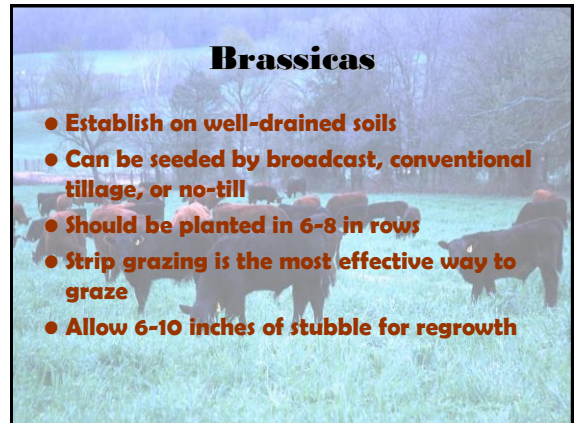
Annual Forages


- Brassicas and small grains planted to extend the grazing season
- Annual grasses are used to fill in during the “summer slump” and the ends of the grazing season
- Fit into a crop rotation following corn silage harvest
- Reduce feed costs



Brassicas


- Establish on well-drained soils
- Can be seeded by broadcast, conventional tillage, or no-till
- Should be planted in 6-8 in rows
- Strip grazing is the most effective way to graze
- Allow 6-10 inches of stubble for regrowth





Kale

- 'Premier' stemless variety grows fast, will regrow
- Stubble 3-4"
- Good quality forage



Turnip

- Early fall grazing
- Edible root, stockpile
- Graze tops first, allow regrowth then graze tops and root



Rape

- Graze before plant reaches maturity
- 4 week regrowth period
- http://pasturedairy.kbs.msu.edu/ou_treach/past_workshops/



Swede

- Late fall grazing
- Large edible root
- Slower growing
- Ideal for stockpiling



Sorghum Sudangrass



Sorghum-Sudangrass

- Summer annual grass that is easier to establish than WSG
- Follows the same growth pattern as WSG
- Seed at 50-75 lbs/ac
- Graze between 18-30 inches in height
- Stock animals to graze grass down in less than 10 days
- Prussic acid can be a problem
 - Don't graze during drought or frosts
 - Always graze at 18" or higher

Pearl Millet



Pearl Millet

- Graze in at 18-24 inches, out at 8 inches
- Clip to discourage seed head production and encourage regrowth
- More widely grown in the South
- High drought tolerance
- Doesn't produce prussic acid
- Seed can be broadcast or drilled, in narrow or wide rows. Plant at a soil depth of ½ to 1 inch

Corn

- Grazing varieties
- Graze summer and early fall
- Strip graze to reduce trampling



Other Options

- Small Grains
- Stockpiling
- Crop Residue



Small Grains:

wheat, barley, rye, triticale


- October to December and March to April
- Graze at 8" – remove at 3-4"
- Late August seeding (3bu/acre + 40lbs N/acre)
- Forage is high in protein and low in fiber
- In the spring, if harvesting for grain, stop grazing when plants start to grow erect, right before jointing




Small Grains




Triticale



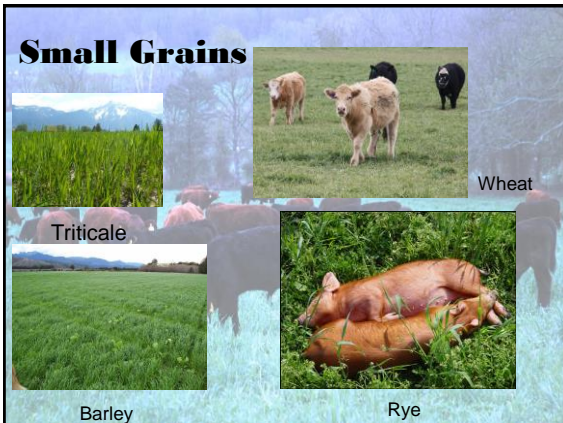
Wheat



Barley



Rye



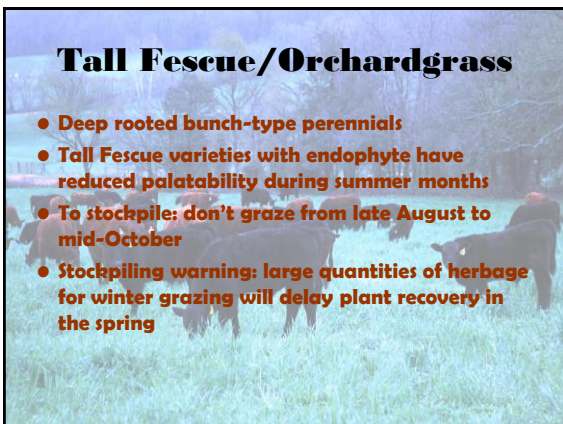
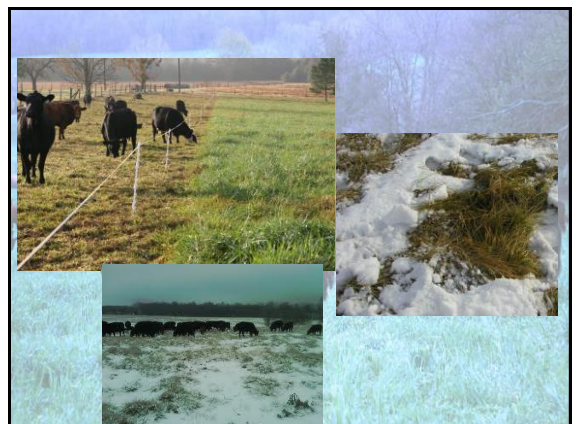
Stockpiling Species

Stockpiling is accomplished by removing grazing animals from a pasture at some time during the growing season (late July) and allowing forage to accumulate for grazing later in the season (late fall, early winter)



Tall Fescue/Orchardgrass

- Deep rooted bunch-type perennials
- Tall Fescue varieties with endophyte have reduced palatability during summer months
- To stockpile: don't graze from late August to mid-October
- Stockpiling warning: large quantities of herbage for winter grazing will delay plant recovery in the spring

Crop Residues



Corn Stover

- Extend grazing season into winter
- Average to good quality forage
- Best when using rotational grazing methods
- May need to supplement protein to pregnant animals
- Maintains forage quality up to 60 days
- Always include minerals and vitamins



Soybean Residue

- Excellent source of winter forage
- Stubble has higher protein values than corn stover, but is less digestible and requires more acres per animal

Small Grain Residue

- When establishing small grains, plant orchardgrass or timothy and clover
- After small grains are harvested, livestock can graze residue, plus grasses and clover



| Crop | Planting Date | Seeding Rate | Graze |
|----------------------|--------------------------|---------------------------------------|------------|
| Brassicas | July to September | 4 lbs. + - Rape 3 lbs. + - Turnips | Mature |
| Corn | April 15 to June (later) | 3 bu. + | pre-tassel |
| Sorghum-Sudangrass | May to July 15 | 30 lbs. + | 30" |
| Rye, Barley, & Wheat | August 15 to October 15 | 2 bu. + | 6-10" |
| Spring Oats | August | 3 bu. + | 6 - 8" |

| Species | Tons DM per Acre |
|--------------------|------------------|
| Brassicas | 1-5 |
| Corn | 3-4 |
| Corn Stalks | 3-6 |
| Oats | 2-4 |
| Rye | 2-3 |
| Sorghum-Sudangrass | 3-8 |

Questions?

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Pasture Walk

- Grazing winter cereal grains and how they fit into a rotation with other annual forages, compliment perennial pastures, and extend the grazing season.
- April 9th at 10AM
- Matt Bomgardners Farm
– 970 North Route 934, Annville, PA 17003.
- For more information call 717-222-0059.