

Forage Options

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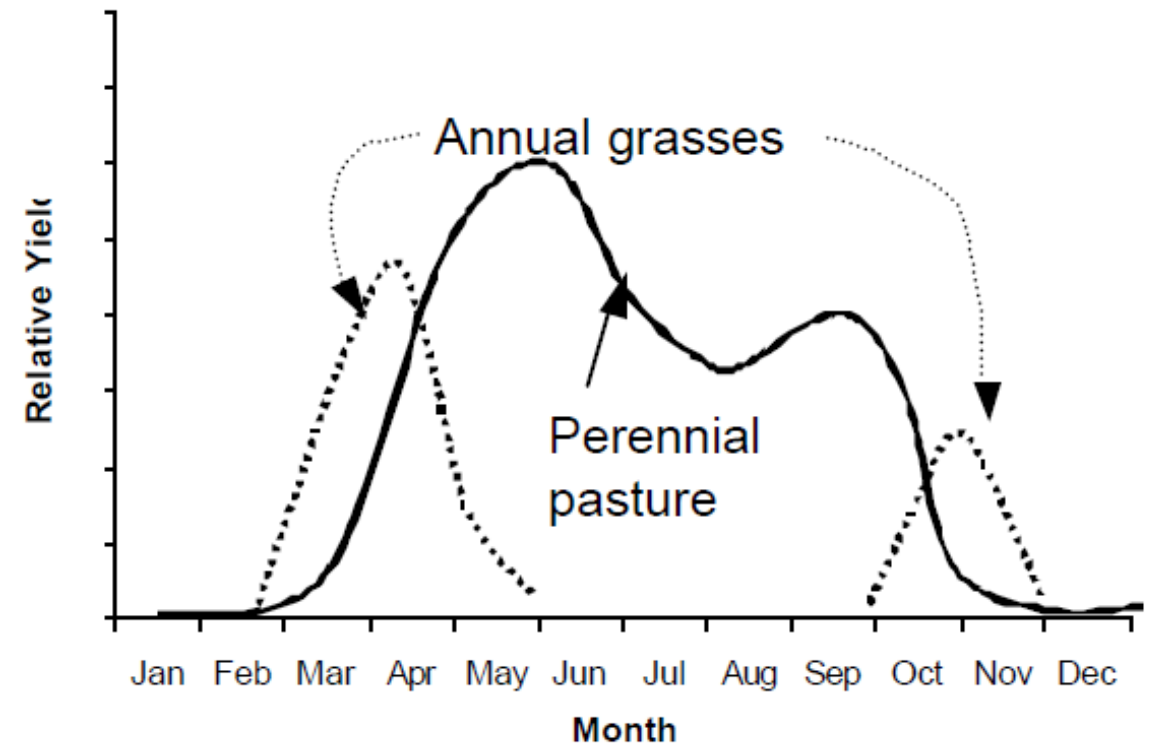
CSU Extension Agronomist, Tri-River Area



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EXTENSION

Winter and Spring Grains

- Winter Grains/Spring Forage (wheat, triticale, barley rye, pea)
 - Chilling necessary to initiate jointing and heading
 - Lower fall forage, greater late winter and early spring forage
 - Jointing and heading can happen rapidly
 - Later plantings
- Spring Grains/ Fall Forage (oats, triticale, barley, turnips, pea)
 - No chilling requirement to flower
 - Significant fall growth and minimal winter hardiness
 - Earlier plantings
 - Ready to graze after tillering - 6-8" tall



Small Grain Mixtures

- Oat and cereal rye, wheat or triticale
 - Oats for fall grazing, winter species provide spring grazing
 - Seed 30lbs/A oats and 70lbs/A triticale @ 1.5" depth



Triticale

- Wheat-rye cross
 - Bred for forage – more biomass and leafy forage than wheat or rye
- More flexibility in fall and spring than oats, rye or wheat.
- Drill 100lbs/A @ 1.5" depth
- Expect forage yields of 1 - 3T/A



Oat and Turnip

- 40-60 days before frost @
~1/2" depth
 - 40lbs/A oat; 3lbs/A turnip
- Low seed cost, high fall growth and high quality forage
- Oats will slowly die out but turnips will continue to grow until ~20F



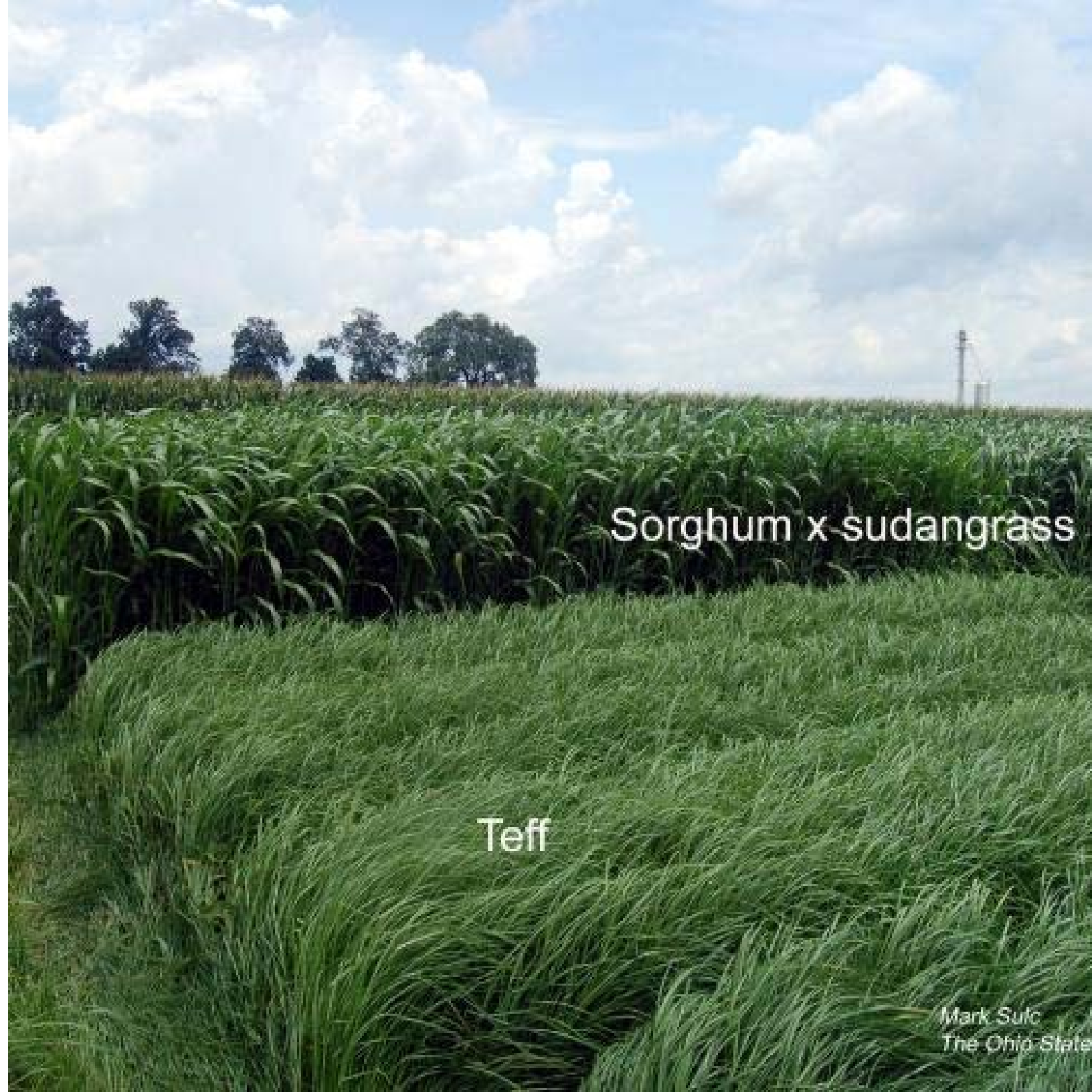
Forage Pea and Triticale (30-70)

- Increases relative feed value over small grain alone
 - Pea seed costs more
- September to October planting @ $\frac{3}{4}$ - 1" – should be 6" before freeze;
- Grazing based on small grain
- Expect forage yields of 1 - 3T/A



Teff

- Warm season annual
- Harvested twice
- ~50% of the water demand of alfalfa or grass
- Low inputs, high yield - 3-5 tons/acre
- Greater feed value than most grasses
- Less likely to accumulate nitrates



Sorghum x sudangrass

Teff

Scenarios Where it Might Make Sense

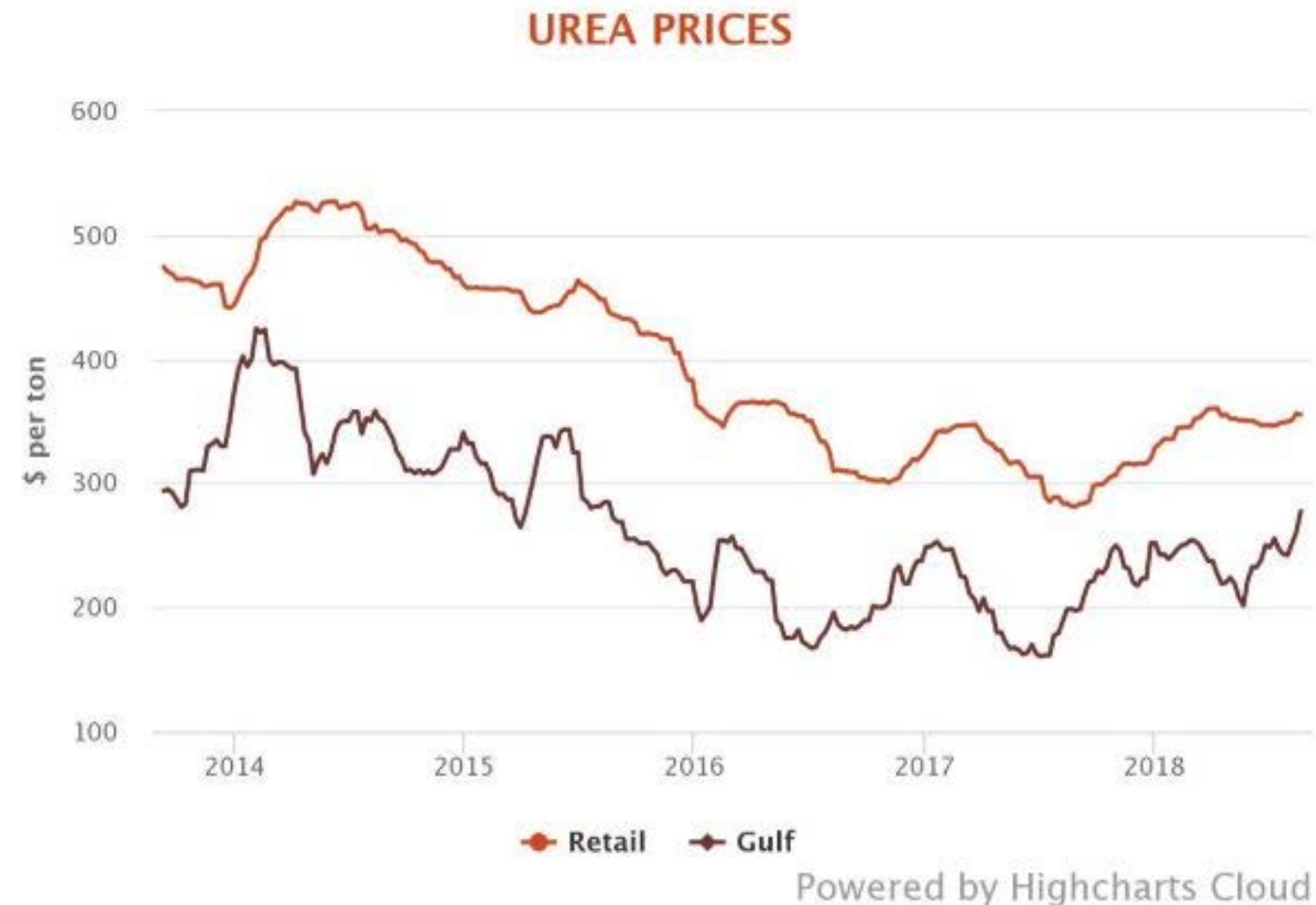
- Emergency Crop
 - Perennial crop failure or severe winter kill in alfalfa
 - Provide flexibility in short water years
- Summer Slump Production
 - Increase available forage when cool season grasses perform poorly
- Double Cropping
 - Can be planted in late spring to mid-summer, after wheat harvest
- Rotation Crop
 - When renovating a grass pasture or alfalfa stand
 - Better yields and feed value than sorghum-sudan and other small grains

Teff Hay Production Practices

- Seed 4-5 lbs./acre into clean, firm seedbed (~1/4" deep), 7 lbs. if planting into a poor seedbed - using grain drill, broadcasting using a Brillion or an air seeder
- Seed after danger of frost w/soil temps above 60F
- Roll or cultipack after planting
- Avoid fields heavily infested with grass weeds
- Light, frequent irrigation, emergence in 3-5 days
- 60 lbs. of N at planting and 60 lbs. after first cutting
- Balance forage value/yield and reduce lodging by cutting at early boot stage, leaving 4" stubble
- 40-50 days between cuttings
- Limited herbicides registered for weed control

Maximizing Forage Production

- Fertilizer prices are relatively low, hay prices are high
- Apply fall N to maximize forage
- Small grains and turnip – 50-70 lbs. of N
- Pea/small grain – 40-60 lbs. of N
- Soil test to find residual nitrate-N from previous crop
 - 10ppm @ 12" depth is 40 units





Around the Valley and on the Farm

- No-till double cropping wheat-teff/sorghum/cowpea/pearl millet
- Interseeding in corn – cover crop mixes for late fall/spring grazing
 - Winter pea, daikon radish, cereal rye @ 22lbs/A

Thank you

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