Warm Season Turfgrasses for Equine Turf

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Bermudagrass

**Positives**
- Handles wear well
- Recovers well
- Quick growth rate
- Lots of cultivars – both seeded and sprigged
- Pretty drought tolerant

**Negatives**
- Cannot tolerate shade
- Not especially cold tolerant
- Highest quality cultivars are vegetative
Fig. 2. A growing degree day (GDD = [(Max. Temp. °C + Min. Temp. °C) / 2] − 5°C) model was applied to the establishment of ‘Mirage’ bermudagrass in the transition zone and it was found that at least 950 accumulated growing degree days prior to 1 October were required to reach 95% coverage or more bermudagrass. Using this growing degree model and 30-year normal weather data, bermudagrass could be seeded as late as 2 August in West Lafayette, IN (north of the transition zone); 6 August in Washington, DC; 6 August in Manhattan, KS; 8 August in Louisville, KY; 8 August in Fayetteville, AR; 9 August in Nashville, TN; and 9 August in St. Louis, MO and still produce 95% or more coverage.
Bermudagrass ‘Types’

- We have two general big groups – bermudagrasses that produce viable seed, and thus we have selected cultivars from those seeded varieties.
- AND bermudagrasses that are hybrid, and the seed is sterile, and the grasses must be planted as sprigs or sod. These are our ‘vegetative’ hybrids.
- *Cynodon dactylon*
- *Cynodon dactylon x C. dactylon*
- *Cynodon dactylon x C. transvaalensis*
Interspecific Hybrid
September 16th 2016
Hulled versus Unhulled Bermudagrass – seeded types

Seeded bermudagrasses
• Excellent cultivars available
• Better winter (cold) tolerance
• Lots of new looks into using these farther north, and in mixes with cool season grasses
Seeding Rates?

• Historically, people just said 2.0 lb PLS/1000 ft², but recent research favors lower seeding rates.
• Munshaw found that seeding rates of 0.25 to 0.5 lb PLS/1000 ft² produced more robust plants.
• Coverage not improved if seeding rates not greater than 1.0 lb PLS/1000 ft².
• Based on research, a seeding rate of 0.5 to 1.0 lb PLS/1000 ft² is recommended in most situations.

Review article by Aaron Patton and others.
What is Pure Live Seed (PLS)?

\[ \text{%PLS} = \text{% purity} \times \text{% germination} \]

\[ 88\% = 0.98 \times 0.90 \]

To seed at 20 lb/A with this seed use 23 lb/A
In the mid-south, warm-season turfgrasses go dormant in the winter.
SHADE
Wear and compaction of turf
Bermudagrass cultivar
Traffic study
July 20th 2017
Auburn, AL
Bahiagrass

• Very coarse textured
• There are NO specific cultivars for turf (Tifton 9 is an improved one)
• Handles drought and traffic well
• Seeded
• Seeding at 18 to 20 pounds per acre, broadcast (Tifton 9 @ 12-15 lb/A).
• Add nitrogen @ 35-50 pounds/A at planting, more later)
Bahiagrass
THANKS!

EQUINE SPORTS TURFGRASS ALLIANCE