Turfgrasses: Right Choice – Right Care
April 18, 2015

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Selecting the Right Turfgrass
- What type of lawn is desired or expected?
  - Better Homes and Garden Showcase?
  - Average lawn?
  - Parking area?

Selecting the Right Turfgrass
- What level of maintenance will the lawn be given?
  - Most turfgrasses will respond to a wide range of maintenance levels, however, there is an optimum.

Maintenance Level
- Low Input
  - Fertilized infrequently
  - Mowed as needed
  - Seldom watered

- Moderate Input
  - Fertilized multiple times per year
  - Mowed weekly
  - Watered as needed

- High Input
  - Frequent fertilization with low rates (spoon-feeding)
  - Mowed frequently
  - Irrigation to prevent wilt

Region of Adaptation
- Warm-season (Southerners)
  - Centipedegrass
  - St. Augustinegrass
  - Bermudagrass
  - Zoysiagrass
  - Bahiagrass
  - Seashore Paspalum

- Cool-season (Yankees)
  - Kentucky bluegrass
  - Tall Fescue
  - Perennial ryegrass
  - Annual ryegrass
  - Sheep Fescue
  - Hard Fescue
  - Red Fescue
  - Rough Bluegrass
**Bahiagrass**

- **Advantages**
  - Excellent drought tolerance
  - Low fertility requirements
  - Low maintenance
  - Tolerant of sandy, infertile soils
  - Establishes from seed

- **Disadvantages**
  - Produces abundance of seedheads
  - Open growth habit encourages weed competition
  - Susceptible to mole crickets
  - Coarse stems are difficult to mow
  - Not wear tolerant

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*Turgeon, A. J. 2002. Turfgrass Management*
Bahiagrass
Current UF/IFAS Fertility Recommendations (lbs. N 1000 ft$^{-2}$ yr$^{-1}$)

- North Florida: 2-3 lbs. N 1000 ft$^{-2}$ yr$^{-1}$
- Central Florida: 2-4 lbs. N 1000 ft$^{-2}$ yr$^{-1}$
- South Florida: 2-4 lbs. N 1000 ft$^{-2}$ yr$^{-1}$

Bermudagrass

- **Advantages**
  - Vigorous, light to dark green, dense turf.
  - Well adapted to most soils and climatic regions in Florida.
  - Excellent wear, drought, and salt tolerance.
  - Establishes rapidly.

- **Disadvantages**
  - Large number of cultural and pest problems
  - Dormant bermudagrass must be overseeded to maintain year-round green color.
  - Low shade tolerance.

Bermudagrass Cultivars

- **Tifway (419)** – fine textured; dark green color, and forms few seed heads.
  - Most widely used bermudagrass.
- **TifSport** – improved fairway type grass with better certification standards.
- **TifGrand** - Tolerance of 60% to 70% shade.
- **Celebration** – a selection of common bermudagrass from Australia.
- **Seeded Varieties** – Many new varieties being tested and many on the market.
  - NuMex Sahara, Yuma, Princess 77.
**Bermudagrass**
Current UF/IFAS Fertility Recommendations (lbs. N 1000 ft\(^{-2}\) yr\(^{-1}\))

- North Florida: 3-5 lbs. N 1000 ft\(^{-2}\) yr\(^{-1}\)
- Central Florida: 4-6 lbs. N 1000 ft\(^{-2}\) yr\(^{-1}\)
- South Florida: 5-7 lbs. N 1000 ft\(^{-2}\) yr\(^{-1}\)

**These rates are likely too high for low maintenance areas.**

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**Centipedegrass**

Ground pearls – no control options available

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**Centipedegrass Decline**

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**Spittlebugs**

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**The Mystery of the Yellowing Centipedegrass Home Lawn……**
Centipedegrass

Current UF/IFAS Fertility Recommendations (lbs. N 1000 ft⁻¹ yr⁻¹)

North Florida: 1-2 lbs. N 1000 ft⁻¹ yr⁻¹
Central Florida: 2-3 lbs. N 1000 ft⁻¹ yr⁻¹
South Florida: 2-3 lbs. N 1000 ft⁻¹ yr⁻¹

Centipedegrass Cultivars

- Common (yellow or red stem)
  - Most commonly found
- TifBlair (Georgia release)
  - Cold tolerance claims
- Hammock (Florida release)
  - South Florida ONLY

Seashore Paspalum
Seashore Paspalum

- UF currently doesn't recommend Seashore paspalum for average home lawns due to the management complexities.

St. Augustinegrass

Gray Leaf Spot in St. Augustinegrass
Large Patch in St. Augustinegrasses

Take-all Root Rot in St. Augustinegrass

SAD (St. Augustinegrass Decline) Virus

Has not occurred in Florida for many years!

Chinch Bugs
Piercing/Sucking insects

Chinch Bug Injury

Floratam
Chinch Bugs

Floratam

Tropical Sod Webworm Damage

Tropical Sod Webworm Larvae

St. Augustinegrass

St. Augustinegrass = Zoysiagrass

Centipedegrass

Bahiagrass

Bermudagrass = Seashore paspalum

Turf Shade Tolerance
How Do I Manage Turf in the Shade?

- Remove shade sources (trimming trees)
- Reduce traffic in shaded areas
- Increase mowing height if possible – more shoot tissue for photosynthesis will help turf perform better
- Reduce irrigation in shaded areas
- Reduce fertilization – trying to promote shoot growth with high fertility will further stress the grass

St. Augustinegrass Cultivars

- **Bitterblue** - fine textured, blue-green color
- **Floratam** - 1973 release. Coarser than Floratine. 75% sod in Florida. Resistant to SAD but no longer to chinch bugs in Florida.
- **Seville** - Dwarf with salt and shade tolerance, SAD resistance, BUT very susceptible to chinch bugs.
- **Raleigh** - Cold tolerant from NCSU. Turns yellow in hot summer, susceptible to chinch bugs and GLS.

St. Augustinegrass Shade Tolerance

- Seville, Delmar
- Bitterblue
- Palmetto
- Floratam

St. Augustinegrass Cultivars

- **Palmetto** - cold tolerant.
- **AmeriShade** – Very dwarf release from Turfgrass America and The Scotts Co.
- **Sapphire** - newest release from Sod Solutions, Inc.
- **DeltaShade** - newest release from Environmental Turf, Inc.
- **Classic** - proprietary release from Woerner Turf. – Claims of cold tolerance.
- **Captiva** – newest release from the University of Florida.

St. Augustinegrass

**Current UF/IFAS Fertility Recommendations (lbs. N 1000 ft² yr⁻¹)**

- North Florida: 2-4 lbs. N 1000 ft² yr⁻¹
- Central Florida: 2-5 lbs. N 1000 ft² yr⁻¹
- South Florida: 4-6 lbs. N 1000 ft² yr⁻¹

Zoysiagrass
Zoysiagrass

**Advantages**
- Adapted to a wide variety of soils.
- Good tolerance to shade and salt spray.
- Excellent wear resistance.
- Dense turf which reduces weed invasion.
- Some insect resistance.
- Some are drought tolerant.

**Disadvantages**
- Old varieties are slow to establish.
- Seeded varieties available.
- Many produce heavy thatch.
- Slow recovery from damage.
- Insect and disease problems.
- Fine-textured are best if mowed with a reel mower.

Zenith Zoysiagrass

- A seeded zoysiagrass variety available in retail stores.
- Fast establishment.

Mowing Zoysiagrass

- Reel and Rotary mowers

- Broad range: 0.25 to 2.5 inches
  - Cultivar and Species Specific
    - Zoysia matrella (fine textured)
      - 0.5 to 1.5 inches
    - Exceptions: Diamond, Pristine, Cashmere
      - 0.25 inch
    - Zoysia japonica (coarse textured)
      - 1 to 2.5 inches
Thatch and Zoysiagrass

- Zoysiagrass spreads through the production of lateral stems (rhizomes and stolons).
- Lateral stems are resistant to decay
- Easily result in excess thatch
  - Associated with too much lateral stem production.
  - Influenced by:
    - Nitrogen management
    - Mowing off of more than 1/3 of shoot growth

Zoysia Patch – Major Issue
(Rhizoctonia)

Pest Moths
- Tropical sod webworm
  - Wingspan: ½ to 1”
- Fall armyworm
  - Wingspan: ~ 1½”
- Striped grass looper
  - Wingspan: 1½”

Billbugs (Sphenophorus spp.)
- Gray to black weevils
- Larvae are legless
- Hunting billbug has a Y-shaped area on pronotum with a parenthesis-like marking on each side
- Possibly 2+ generations each year in Florida
**Scarab Beetles**  
**Coleoptera: Scarabaeidae**
- Dung beetles and plant-feeders (1400 N. American species)
- Scarabs vary in size, color, and habits, but adults can be recognized by their 3-segmented, clubbed antennae
- Larvae molt 3 times (have 3 instars)

**Masked Chafer**  
*Cyclocephala spp.*

**May/June Beetles**  
*(Phyllophaga spp.)*

**Green June Beetle**  
*(Cotinis nitida)*

**Zoysiagrass**  
Current UF/IFAS Fertility Recommendations  
(lbs. N 1000 ft\(^2\) yr\(^{-1}\))

- **North Florida:** 2-3 lbs. N 1000 ft\(^2\) yr\(^{-1}\)
- **Central Florida:** 2-4 lbs. N 1000 ft\(^2\) yr\(^{-1}\)
- **South Florida:** 2.5-4.5 lbs. N 1000 ft\(^2\) yr\(^{-1}\)

**Table 1:** Common lawn grass species used in Florida. Some of the species may vary by cultivars for characteristics listed.
Gulf Coast Turfgrass Expo and Field Day
06/17/15 Save the Date

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