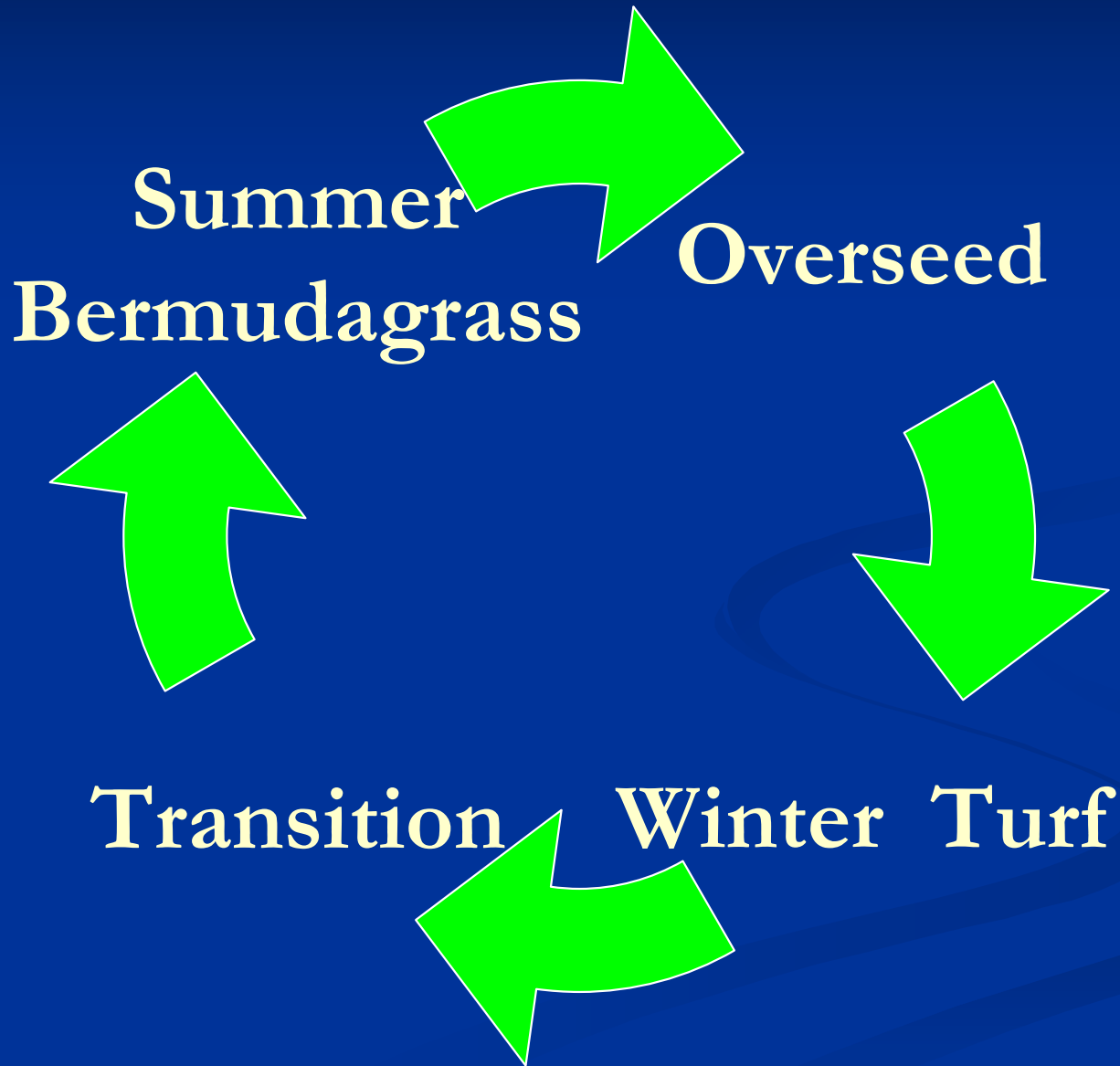


# Overseeding and Transition for Year Round Turfgrass

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# Year Round Desert Turfgrass



# Year Round Desert Turfgrass

- Summer bermudagrass
  - June to September (October)
- Winter ryegrass
  - October to May
  - (September to June)
- Overseed
  - September to November
- Transition
  - May to July

# Year Round Desert Turfgrass

	J	F	M	A	M	J	J	A	S	O	N	D
bermuda						█	█	█	█			
overseed									█	█	█	
ryegrass	█	█	█	█	█					█	█	█
transition					█	█	█					

# Summer Bermudagrass

- Foundation turfgrass
- “Green up” at 55°F @ 4 inch depth
- Active growing at 65°F
  - ≥60°F (lows) for 7 consecutive nights
- “100 days” of growth during summer
  - Before overseeding in fall
  - Establish and grow vigorous rhizomes

# Summer Bermudagrass

## ■ Fertilize

- Begin in May
  - Monthly applications
- N applied at 0.5 lb/1000 ft<sup>2</sup>

## ■ Mow

- Frequency is directly related to mowing height
  - Lower heights require mowing more often
- Do not remove more than one-third (1/3) of the height of the lawn at any mowing event

## ■ Water

- Once every three days during the summer
- AZMET (AZ Meteorological Network)
  - <http://cals.arizona.edu/azmet/phxturf.html>

# Summer Bermudagrass

- Aerify and verticut
  - Core aerify
    - Topdress with sand
  - Light and repeated verticut (vertical mowing)
    - Cuts stolons to stimulate rooting
    - Thins out ryegrass during transition
  - Regular verticut
    - Cuts through thatch

# Overseeding

- Ideal timing for overseeding
  - Night temperatures 55°F
  - Daytime temperatures 80-85°F
- Timing
- Ideal – early October
  - Window – September 1 to November 1
    - Late summer competition with bermudagrass
    - Late fall contend with frost (November 15)



# Overseeding

- Goals for successful overseeding
  - Acceptable establishment
  - Good density
  - Uniform surface
  - Good performance
  - Mow evenly in the spring
  - Uniformly transition in spring

# Overseeding

- Winter turfgrass
  - Perennial ryegrass
  - Annual ryegrass
  - Intermediate ryegrass (a.k.a. hybrid rye)
  - Roughstalk bluegrass (*Poa trivialis*)
  - Creeping bentgrass
- Mixtures and blends
  - Ryegrass – *Poa trivialis* mixture
  - Perennial ryegrass blends

# Overseeding Preparation

## ■ Fertilize

- Stop N fertilization 20-30 days before overseeding

## ■ Mow

- DO NOT scalp or “summer” verticut before overseeding
- Raise mowing height 30 to 40% at 2 weeks before overseeding
- Mow at “old” height 1 to 3 days before overseeding
- Lower mowing height 25 to 30% for last mowing before overseeding
  - Last mowing clippings can be mulch for overseeded seed
  - Shallow repeated verticut on Tifway and other dense varieties

# Overseeding Preparation

- Water
  - Reduce by 30% at 1 to 2 weeks before overseeding
  - Stop watering 2 to 3 days before overseeding

# Overseeding Preparation

- Chemical application
  - Preemergence weed control
    - *Poa* control
      - “yellow herbicides” (Barricade\*), Dimension\*, Rubigan\* will inhibit ryegrass emergence
  - Regulate bermudagrass growth (PGR's)
    - Turflon\* ester
    - Primo\*

# Overseeding Preparation

- Preemergence weed control
  - *Poa* control
    - “yellow herbicides” (Barricade\*), Dimension\*, Rubigan\*
  - Apply 6 to 8 weeks before overseeding
    - Repeat 4 to 6 weeks after overseeding
  - Barricade\*, Dimension\* will injure ryegrass

# Overseeding Preparation

- Regulate bermudagrass growth (PGR's)
  - Turflon\* ester
    - 1 week before overseeding
    - Apply at 4 week intervals after overseeding
  - Primo\*
    - 1 week before overseeding

# Overseeding

- Winter turfgrass
  - Seeding rates
    - 12 to 15 lb/1000ft<sup>2</sup>
    - (600 to 650 lb/A optimum)
    - Golf greens require higher rate
  - Achieving full cover
    - Overseed in 2 directions
      - Drag seed into turf to ensure seed-soil contact
      - Mow seed into turf
  - Irrigate
    - 3 to 4 times per day until seedling emergence



# Winter Turf

- Fertilize
  - Apply N as  $\text{NO}_3^-$  (nitrate form)
    - 0.25 to 0.5 lb/1000 ft<sup>2</sup>
  - Iron (Fe)
- Mow
- Cultivation
  - None
- Water

# Spring Transition

- Temperatures in April
  - Green-up
  - Growth
  - $\geq 60^{\circ}\text{F}$  (lows) for 7 consecutive nights
- Temperatures in May
  - $70^{\circ}\text{F}$
  - Encourage bermudagrass growth

# Spring Transition

- Encouraging bermudagrass growth
  - Mow
    - Lower mowing heights 35% and increase frequency
      - Decreases the leaf area of the winter grass and reduces canopy
      - Exhausts food reserves
  - Water
    - Do not cut water for extended periods

# Spring Transition

- Encouraging bermudagrass growth
  - Fertilizer
    - Increase fertility with light and frequent N applications
      - 0.25 lb/1000 ft<sup>2</sup> every 10 days
  - Cultivation
    - Light verticutting to stress ryegrass
    - Aerification

# Spring Transition

- Chemicals
  - Sulfonylurea herbicides
    - Tools only
- Complementary cultural practices
  - Lower mowing heights to reduce canopy over bermudagrass
  - Lightly verticut to remove ryegrass
    - 80% bermudagrass
  - 0.25 to 0.38 lb N as  $\text{NO}_3$
  - Decrease watering 20% for 1 week
    - Repeat fertilizer application and water cycle to stress ryegrass

# Spring Transition

- Chemicals
  - Sulfonylurea herbicides
    - Manor\*
    - Corsair\*
    - TranXit\*
    - Revolver\*
    - Monument\*
  - Kerb\*

# Spring Transition

## ■ Chemicals

### ■ As a tool

- Force early spring transition to identify areas of weak bermudagrass
- Remove straggling ryegrass in late spring
  - Especially in shade
- Remove ryegrass in roughs

### ■ Use to remove ryegrass by July

### ■ Dual purpose as herbicide

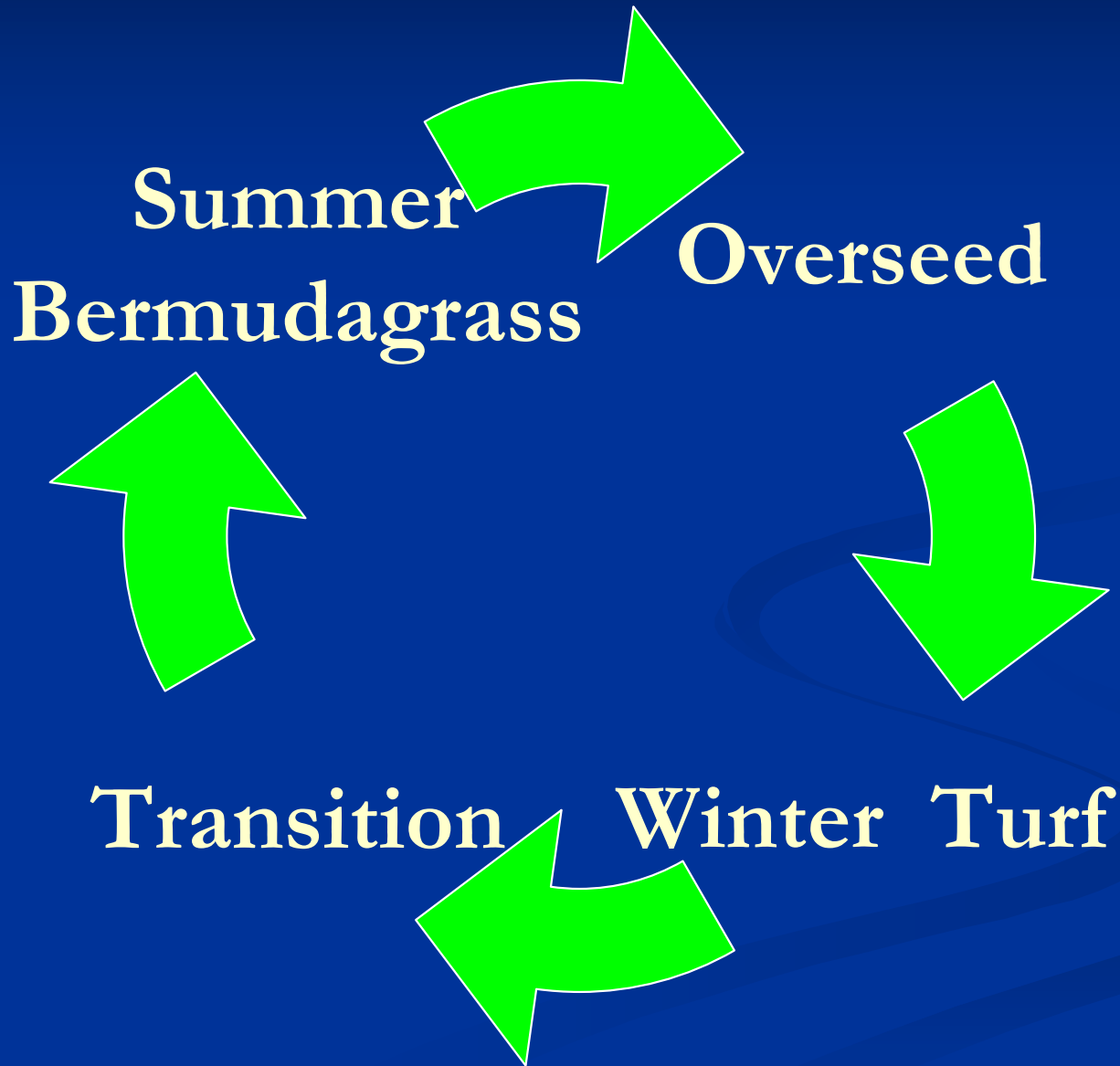
- *Poa* control
- Nutsedge control

# Spring Transition

- Chemicals
  - Dual purpose as herbicide
    - *Poa* control
      - TranXit\*
      - Revolver\*
      - Monument\*
      - Kerb\*
    - Nutsedge control
      - Monument\*



# Year Round Desert Turfgrass



**<http://cals.arizona.edu/turf>**

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Turfgrass Research, Education, and Extension