

Native Grass Forage Workshop: Establishment



Knoxville, TN
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Establishing Natives

As with any perennial grass, must take care of key steps to be successful – **details!!**



Some Challenges with Natives...

- Tiny seed (switchgrass >300,000/lb)
- Slower germination (2 – 4 weeks)
- Low seedling vigor (except e. gamagrass)
- Grow root system first, then top
- Vulnerable to weed pressure

It's "the Competition, Stupid"

THE issue for successful establishment of natives!

- Warm-season perennials
- Cool-season perennials
- Annual grasses
- Advanced weed control is THE solution
 - site selection, crop history both play a role...

But... Competition Control Does Not End with Seeding!

- Clipping (above seedlings)
- Broadleaves controlled >4-leaf stage
- Annual grasses biggest challenge



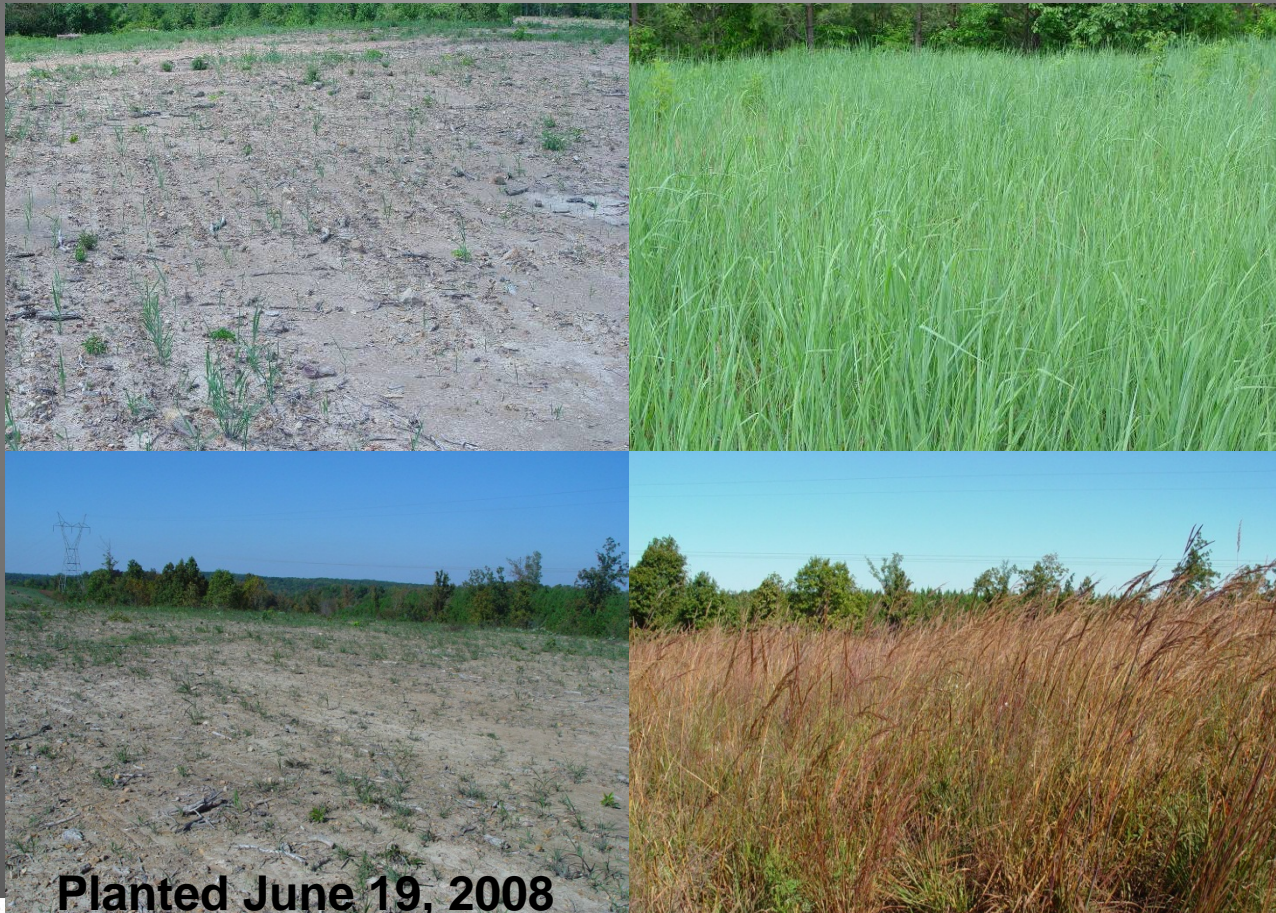
Other Key Issues

- Seed dormancy (Cave-in-Rock, e. gamagrass)
- Shallow seeding
- Good seed-soil contact
- Limited (no) thatch



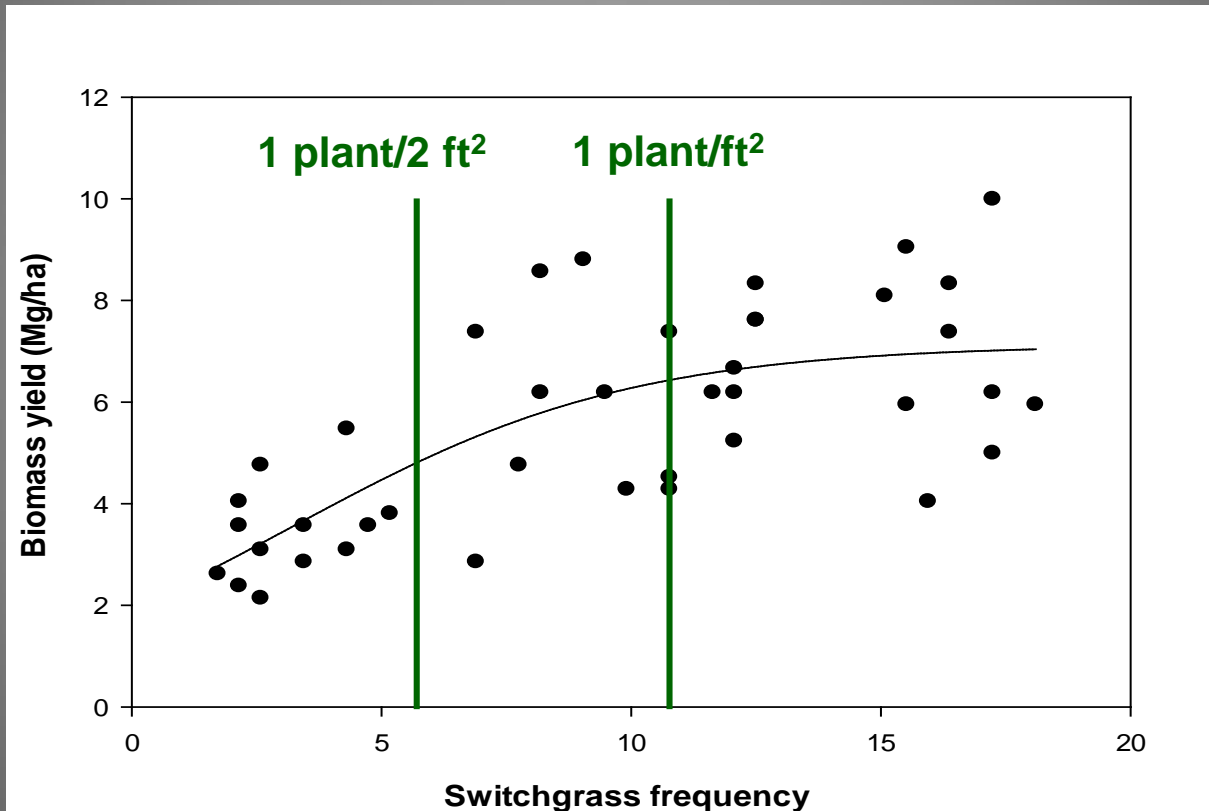
Plant Population Must Be There...

Seedlings not started in first year (first 6-8 weeks),
not likely to be there later...



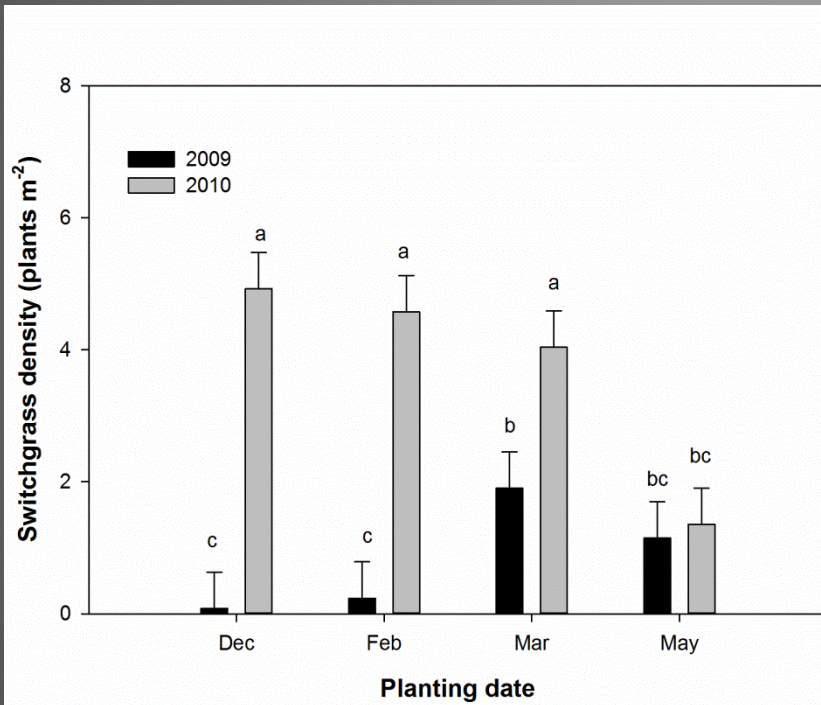
Planted June 19, 2008

Yield vs. Density (2nd year stand)

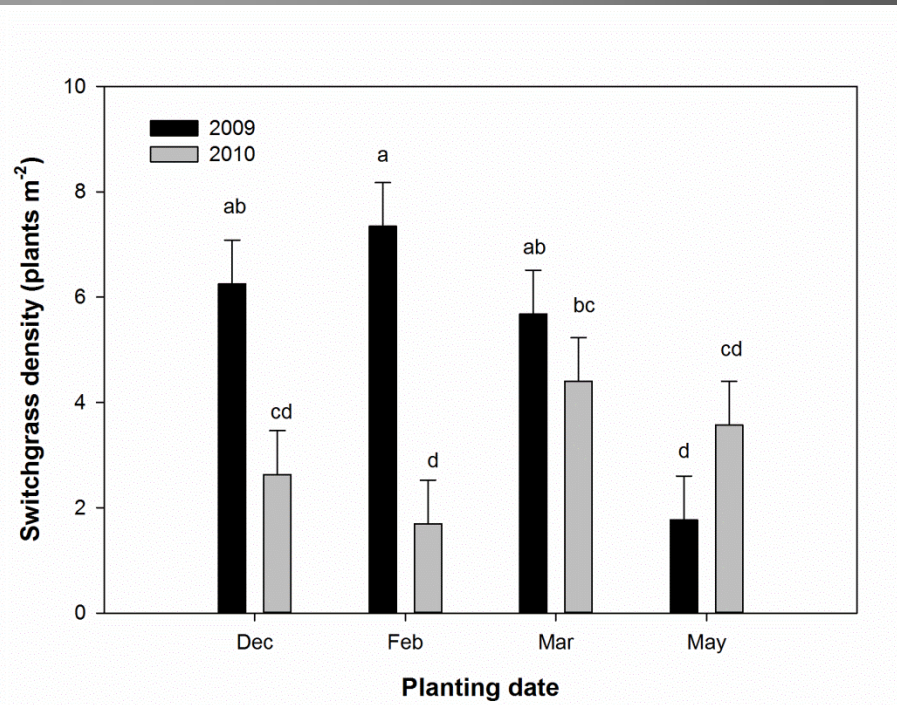


Dormant-season Planting

Springfield

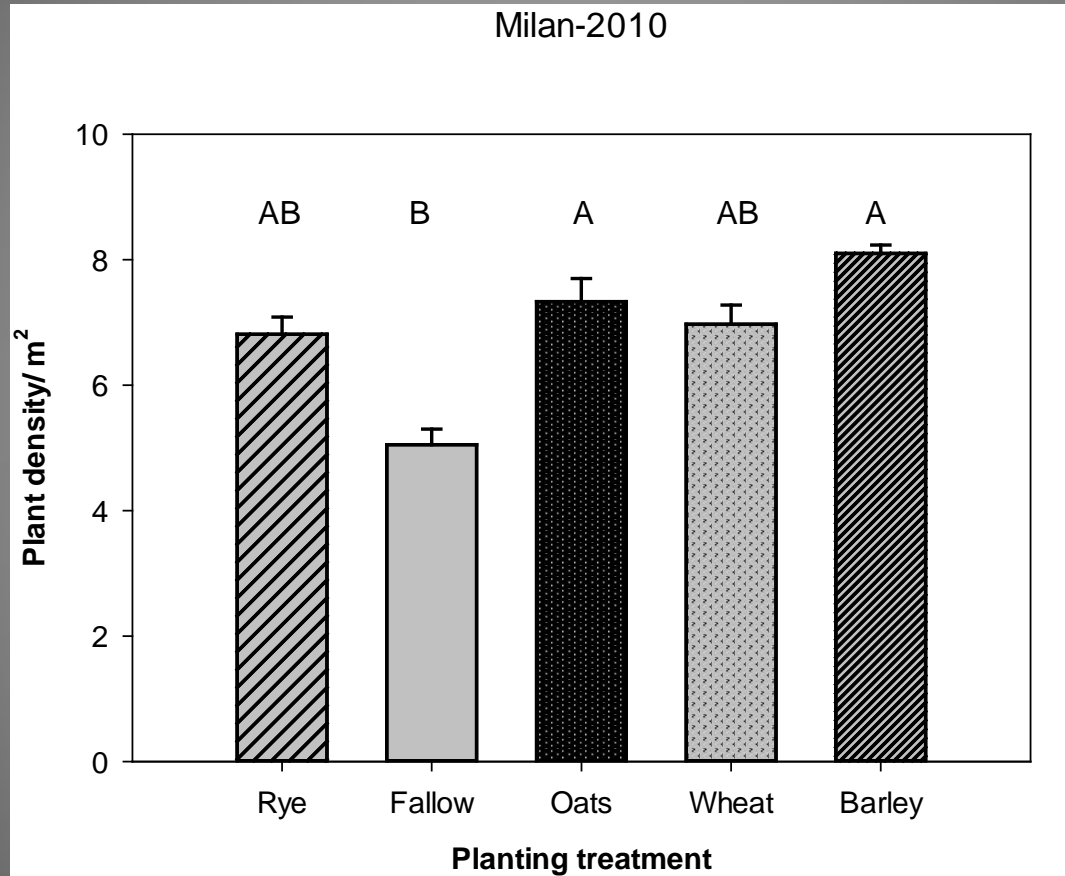


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Year 2 Yield did not vary by planting date at either location

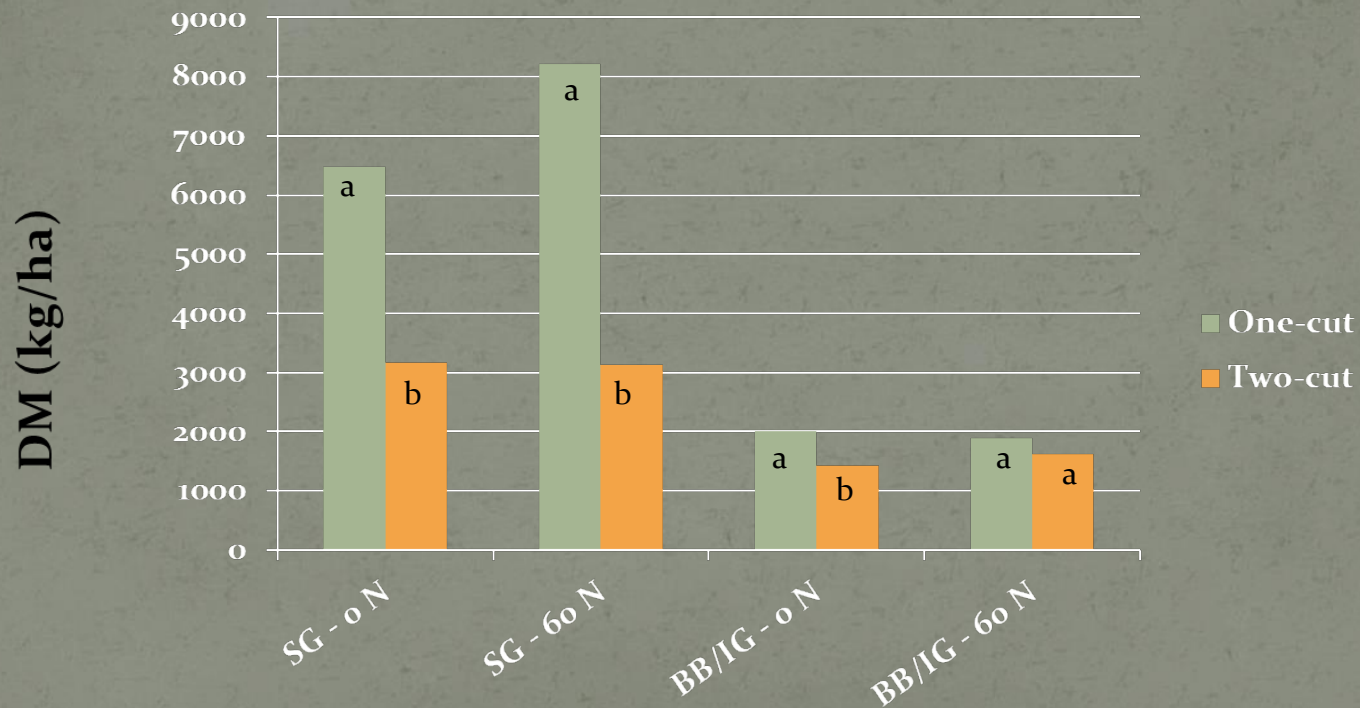
Dormant-season Planting



No difference in planting dates (March = April = June)

Second-year Harvests

June harvest yields in year three based on second-year harvest frequency



Batesville, AR



April 2014 planting; courtesy John Jennings, UA Extension

Summary



Pay attention to detail:

- Good, advanced, competition control
- Plant shallow (clean, firm seedbed)
- Manage first year weed pressure
- Plan for production in year two (limit)

Questions?

Planted April 20, 2012, @ 10 PLS lb/ac
BB (6)/IG(3)/LB(1); picture taken Sept 28, 2012