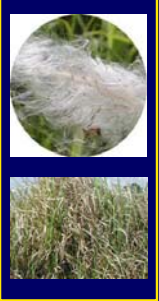


## HABITAT SUSCEPTIBILITY TO INVASION BY COGONGRASS ON CAMP SHELBY TRAINING SITE, MS

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Deborah L. Miller, University of Florida  
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## Cogongrass

- Spread by wind-dispersed seeds, man-dispersed rhizomes, rhizomatous growth.
- Establishes in a wide variety of habitats including roadsides, firing points, upland pine forests, and wetlands



## Why Do We Care?



- Displaces Native Species

## Why Do We Care?

- Poor Forage Quality
- Degrades Gopher Tortoise Habitat




## Why Do We Care?

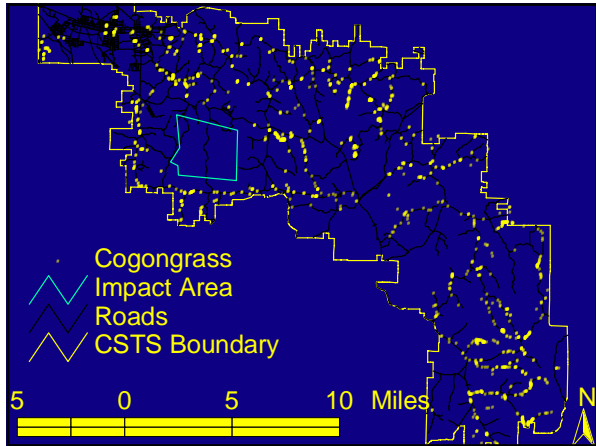
- More Flammable, Burns Hotter
- Alters Fire Intensity and Frequency





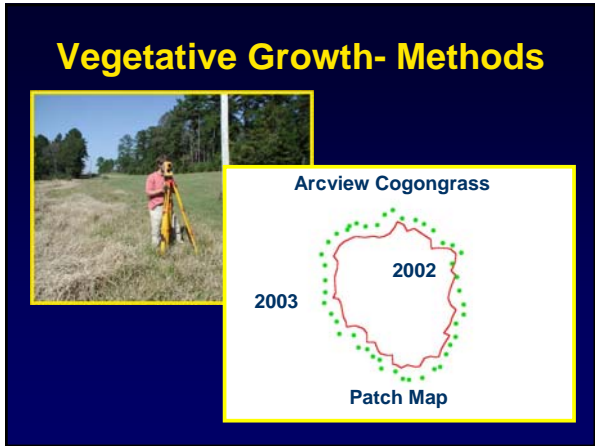
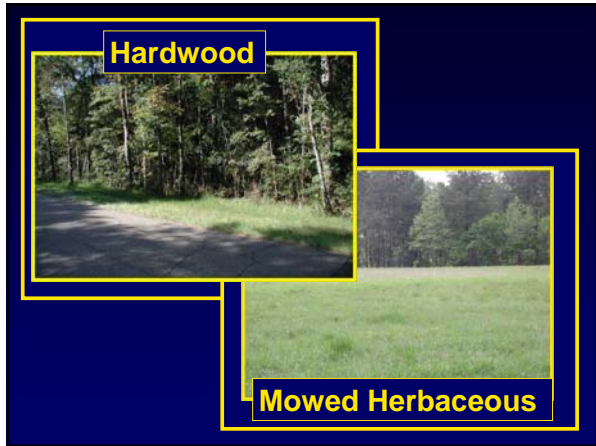
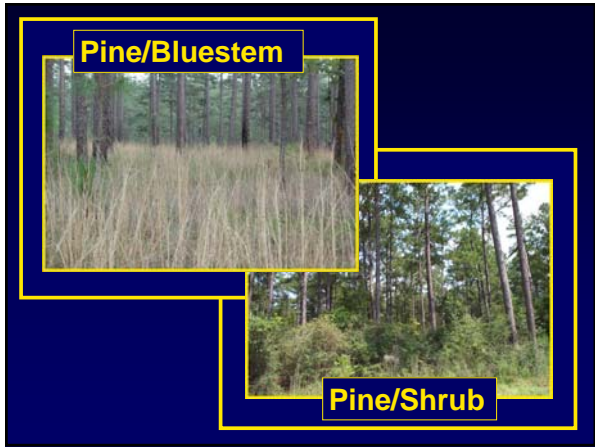
## Camp Shelby Training Site

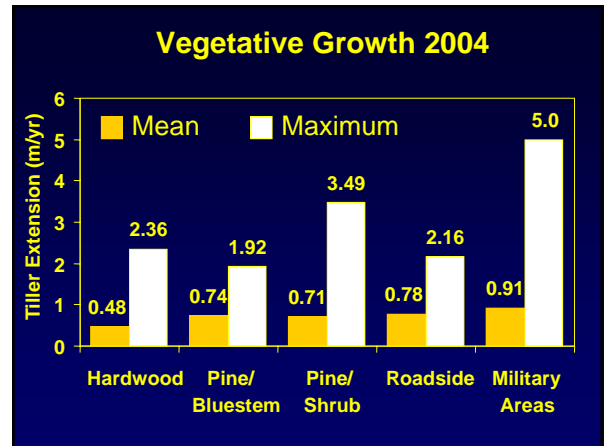
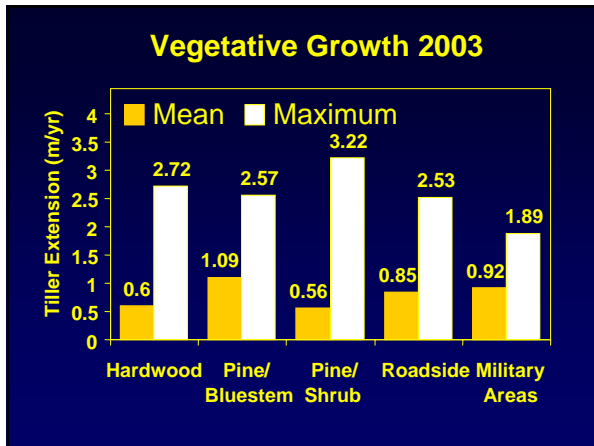




- ### Limited Resources
- Protect and prioritize areas of high conservation value
    - gopher tortoise habitat
    - longleaf pine/bluestem habitat
  - Determine most effective use of resources for prevention and control

- ### Objectives
- Compare
- Linear Vegetative Growth
  - Seed Dispersal
- In Different Habitats





### Soil Disturbance

Military Training Areas

- Patches with > 7 m and > 10 m linear growth
- Reduced patch size for 2003 and 2004 for a patch which was "rehabilitated"- disked and planted with ryegrass

### Seed Dispersal

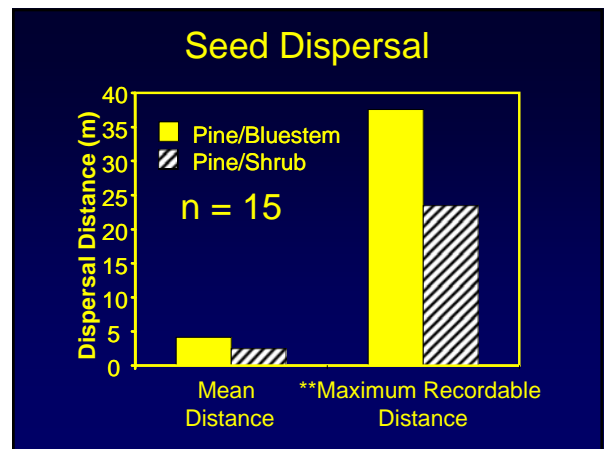
- 3 Locations for Each Habitat
- 5 Releases of 50 Spikelets/Habitat/ Location
- Flag and GPS Locations

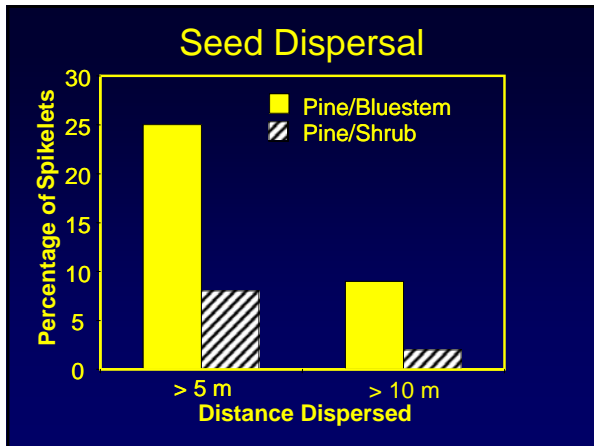
UGA4064030

### Mean Maximum Wind Speed

**Pine/Bluestem**  
1.7 m/sec

**Pine/Shrub**  
0.7 m/sec





### Seedbed

#### % Spikelets Landing on Bare Ground or Litter

Habitat	Percentage
Pine/Bluestem	34 %
Pine/Shrub	16 %

### Conclusion

- Vegetative encroachment by cogongrass occurred in all habitat types
- Cogongrass vegetative growth rate was lowest into the hardwood habitat

### Conclusion

- Soil disturbance can enhance rapid vegetative growth

### Conclusions

- Cogongrass spikelets penetrated further into the pine/bluestem habitat type
- Cogongrass spikelets were more likely to land on bareground or litter in the pine/bluestem habitat

### Priorities

- Pine/bluestem and Military Training Areas (Mowed Herbaceous Habitats)
- Treatment of cogongrass prior to activities which create soil disturbance or reduce canopy/shrub cover

