

# **Native Seed: History, Production and Establishment**

**Robert Hoffman  
Roundstone Native Seed**



# Site Conditions

*Where is the site located?*

Piedmont?

Coastal Plain?

Mountains?

Soil Conditions

Sun Conditions



# What is our purpose?

Mimic Nature?: Recreate natural settings.

Forage: Haying and Grazing

Habitat? : deer, turkey, rabbit, quail, songbirds

Bedding, fawning, brooding, cover

Pollinators?: Bees, butterfly's, moths, wasps, etc.

Erosion Control, mitigation, ground coverage?



Prairie Remnant

# Forage



# Habitat

- Songbirds
- Quail
- Turkey
  
- Government Program



# Pollinator Plot

- **Blooms throughout the growing season**
  - Minimum 8 wildflower species
  - 20 + species
  - Nectar and Pollen Resource
- **Undisturbed Soil**
  - Ground Nesting
- **Host Plants**
  - Milkweeds

# Pollinator Plot continued

- **Don't forget the Grass and Grass-like Species!**
  - Erosion control
  - Host plants
  - Winter aesthetics
  - Nest Sites
- **10-50% Grasses**



# Erosion Control



# Seed Considerations

- Flowable
- Size
- Weight
- Germination
- Dormancy
- Type



Flowable











Size and Weight



# Ecotype



A photograph of a lush green field of tall grass. In the foreground, a tree stump is visible, partially obscured by the grass. The background consists of a dense line of tall, leafy trees under a clear sky. The word "Cultivar" is centered in the middle of the image.

Cultivar

# Plant Considerations

- Aesthetics.... What is our desired look?
- Height
- Structure
- Size
- Color
- Blooming period
- Aggressiveness of plants
- Dormancy
- Longevity
- Site conditions





Big Bluestem



Deer Tongue Grass



Florida Tick Trefoil



Blackeyed Susan





**Slender Mountain Mint**



Indian Grass



Wild Senna



Lowland Coneflower



Frank's Sedge

# Mix Considerations

- PLS
- Number of seeds per pound
- Number of seeds per square foot
- Likelihood of seeds to germinate due to size
- Size of plants at maturity
- % Grass to Forb Ratio
- % Annual to perennial Ratio
- Variety of Color
- Ecological Bloom periods

# Pure Live Seed

- How is Pure Live Seed (PLS) Calculated?
  - A certified test determines the Purity % and Germination % of each lot of Seed
- Purity = the percent of actual seed in the lot
- Germination = the percent of actual seed that will germinate
- $PLS = \text{Purity \%} \times \text{Germination}$





Pure Live Seed = Purity X Germination





# Size of plant at maturity





Savannah



Wetlands



Prairie Remnant



Bunch Grass









# Common Seeding Methods

- Broadcasting
- Drilling
- Hydroseeding











# April Planting



Jason Smith NC Wildlife Commission



# 6 weeks



Jason Smith NC Wildlife Commission

# 12 Weeks



Jason Smith NC Wildlife Commission

# 20 weeks



Jason Smith NC Wildlife Commission

# Cover Crops



# Nurse Crops













# Planting with Nurse Crop



6-12 weeks



20 weeks



# 2<sup>nd</sup> year Growing Season



# 2<sup>nd</sup> year Dormant Season



