Cogongrass and forage weed control update
April 5, 2010

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Presentation Outline

• Alabama cogongrass eradication program
• Forage weed control update
  – Prowl H₂O
  – Pastora
Cogongrass
*Imperata cylindrica*
Cogongrass is impacting pine plantations north of Tuscaloosa, AL!
What about ag fields?

- Deep, repeated tillage + glyphosate will eliminate cogongrass
- Key is to till below the rhizome layer
What about agricultural field edges?

• Glyphosate (minimum 41% active ingredient)
  – Spot treat with 4% solution
  – Broadcast rate is 4 lb ai/A
  – Add surfactant if it is not in the product
  – Timing: twice per growing season for 2-3 years
    • Late spring or early summer (May to June)
    • Late summer or fall (August to October)

• **DO NOT** recommend imazapyr (Arsenal, Chopper) on ag field edges
Alabama Forestry Commission Grant

• American Recovery and Reinvestment Act of 2009 (ARRA)
  – ~6.3 million dollar cogongrass eradication grant
  – 3 year period

• Goals of grant
  – Create jobs
  – Stimulate economy
  – Eradicate cogongrass north to south!

• [www.alabamacogongrass.com](http://www.alabamacogongrass.com)

• [www.forestry.alabama.gov](http://www.forestry.alabama.gov)
Program details

• Program is focused on private, nonindustrial landowners

• 100% cost share for chemical and treatment up to certain number of acres depending on the program

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Programs (1-3)

- **Program 1 – Detect and Eradicate** – Infested lands north of US Highway 82

- **Program 2 – Control and Mitigate** – South of US Highway 82 and near the state’s borders (GA, FL, MS)

- **Program 3 – Underserved And Limited Income Landowners** – Sumter, Choctaw, Marengo, Hale, Perry, Dallas, Wilcox, Lowndes, Montgomery, Bullock, Macon, Russell, and Barbour Counties
Programs (4-6)

- **Program 4 – Stop The Spread** – Property within 5 miles south of US Highway 82. Infestations that have migrated off of contaminated roads and rights-of-ways.

- **Program 5 – Threatened and Endangered Species Habitat Protection** – Property contains species that are designated as critically imperiled (G1) or imperiled (G2) and are threatened by cogongrass.

- **Program 6 – Landowner Lottery** – Lottery-selected mapping and control program.
Alabama Cogongrass Control Center - Home

To identify cogongrass, download the field identification guide [here](http://www.alabamacogongrass.com). This booklet has pictures and descriptions of cogongrass—as well as other grasses sometimes mistaken for it. The latest news is on our [blog](http://www.alabamacogongrass.com/blog).

In 2009 President Obama signed the American Reinvestment and Recovery Act (ARRA). Through the Alabama Forestry Commission's leadership, a $6.281 million grant was funded to 1) create jobs and 2) control, mitigate, and eradicate cogongrass—a federally listed noxious weed—in Alabama. [Larson & McGowin, Inc](http://www.larsonmcgowin.com) was selected to administer the project in September 2009.

Larson & McGowin, Inc is a full-service forest management and consulting firm headquartered in Mobile. The company was founded in 1957 and has branch offices in Greenville and Birmingham, Alabama as well as Arkansas, Georgia, Louisiana, and Texas. The firm has decades of experience providing property management services to small and large ownerships. Consulting and large scale project management experience includes forest inventory, appraisal, technical mapping, and analysis. Though focused on the southern United States, the firm has experience in other regions including U.S. Northeast, Pacific Northwest, Canada, Central America, and South America. Its subsidiary, [Silvics Solutions](http://www.silvicsolutions.com), offers natural resource-focused software and information technology services.

Barrett McCall, RF/ACF and President of Larson & McGowin: "Alabama is a world leader in forest..."
Prowl H₂O for use in **bermudagrass** hay and pastures

- Supplemental label expires Dec 31, 2011
- Established bermuda only
- Dormant bermuda only
- 1.1 to 4.2 quarts per acre
- Single or split apps ok
- Pre-emergent weed control only
  - Requires rainfall for activation
- **NOT labeled for use** after 1st hay cutting
How Prowl H₂O fits

- Italian ryegrass control (above 4 pt/A)
- Seedling Johnsongrass control
- Field sandbur, crabgrass control
- Signalgrass suppression
Restrictions

• Do not harvest hay for 60 days after application
• Do not graze or cut forage for 45 days after application
• See Prowl H₂O label for rotational restrictions
  – Minimum 270 days
DuPont™ Pastora® herbicide

• A **new** herbicide for bermudagrass pastures and hay fields
• Will provide post-emergence control of tough **grasses** such as sandbur, Johnsongrass, barnyardgrass and many others
• Will provide post-emergence **and** residual control of key **broadleaf weeds** such as croton and bitter sneezeweed
DuPont™ Pastora® herbicide

• Active Ingredients
  – Nicosulfuron - 56.2%
  – Metsulfuron methyl - 15%

• Formulation -
  – 71.2% Dry Flowable

• Non volatile

• Based on blend components:
  – Not expected to be a federally restricted-use pesticide
  – Not expected to have haying or grazing restrictions
DuPont™ Pastora® herbicide

• Proposed label
  – Use Rate - 1.0 to 1.5 ounces/acre
    • Can apply up to 2.5 ounces/year
  – Apply by ground or air
    • Ground - 10 GPA / Air - 2 GPA (minimums)
  – Requires an Adjuvant
    • NIS or COC

• Fertilizer
  – Low rate for improved weed control
  – As carrier - liquid N
Pastora® Proposed Label – Grasses Controlled

- Barnyardgrass
- Broadleaf Signalgrass
- Crabgrass, Large*
- Downy Brome*
- Foxtails – bristly, giant, green, and yellow
- Goosegrass*
- Itchgrass
- Johnsongrass
- Panicum – browntop, fall, Texas
- Pensacola bahiagrass
- Quackgrass*
- Ryegrass - Italian, perennial
- Sandbur - field, longspine
- Shattercane
- Timothy
- Volunteer Cereals
- Wild Oats
- Wild Proso Millet
- Wirestem Muhly
- Witchgrass
- Wooly Cupgrass

* Suppression
Pastora® Proposed Label – Broadleaf Weeds Controlled

- Bitter Sneezeweed
- Blackeyed-Susan
- Broomweed, common
- Buttercup
- Canada Thistle*
- Carolina Geranium
- Chickweed
- Common mullein
- Curly Dock
- Dandelion
- Dogfennel
- Henbit
- Lambsquarters

- Marestail
- Morningglory
- Musk Thistle*
- Pigweed, redroot, smooth
- Plaintain
- Smartweed - greed, ladysthumb, pale, PA
- Wild carrot
- Wild garlic
- Blackberry*, Multiflora Rose*, Dewberry*
- Many more...

* Suppression
Proposed Label – Application Timing

• Time applications to the target weed
  – Grasses < 2” in height (except Johnsongrass <18”)
  – Broadleaf weeds < 4” in height
• Consider time of year and when weeds are emerged
  – Dormant bermudagrass for winter annual weed control
  – Bermudagrass green-up for early summer annual weeds
  – Summer timings for later summer annual and perennial weeds
DuPont™ Pastora® herbicide
Dormant application for Winter Annuals
Summer Applications of DuPont™ Pastora® herbicide
Johnsongrass Control

Untreated

Treated
DuPont™ Pastora® herbicide
Sandbur Control
University Field Trial Feedback

• Fills the need for winter annual grass control prior to first hay cutting (Best timing is prior to bermudagrass green-up or nitrogen application)
• Fits the need for summer annual (if emerged) and control of key perennial grasses (R. Johnsongrass, Pensacola Bahiagrass)
• Best summer annual timing is after 1st or 2nd hay cutting when problem grasses are at 2-4 inch re-growth stage
• Allows quick “grow in”
Questions?

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