

*A joint educational publication of*

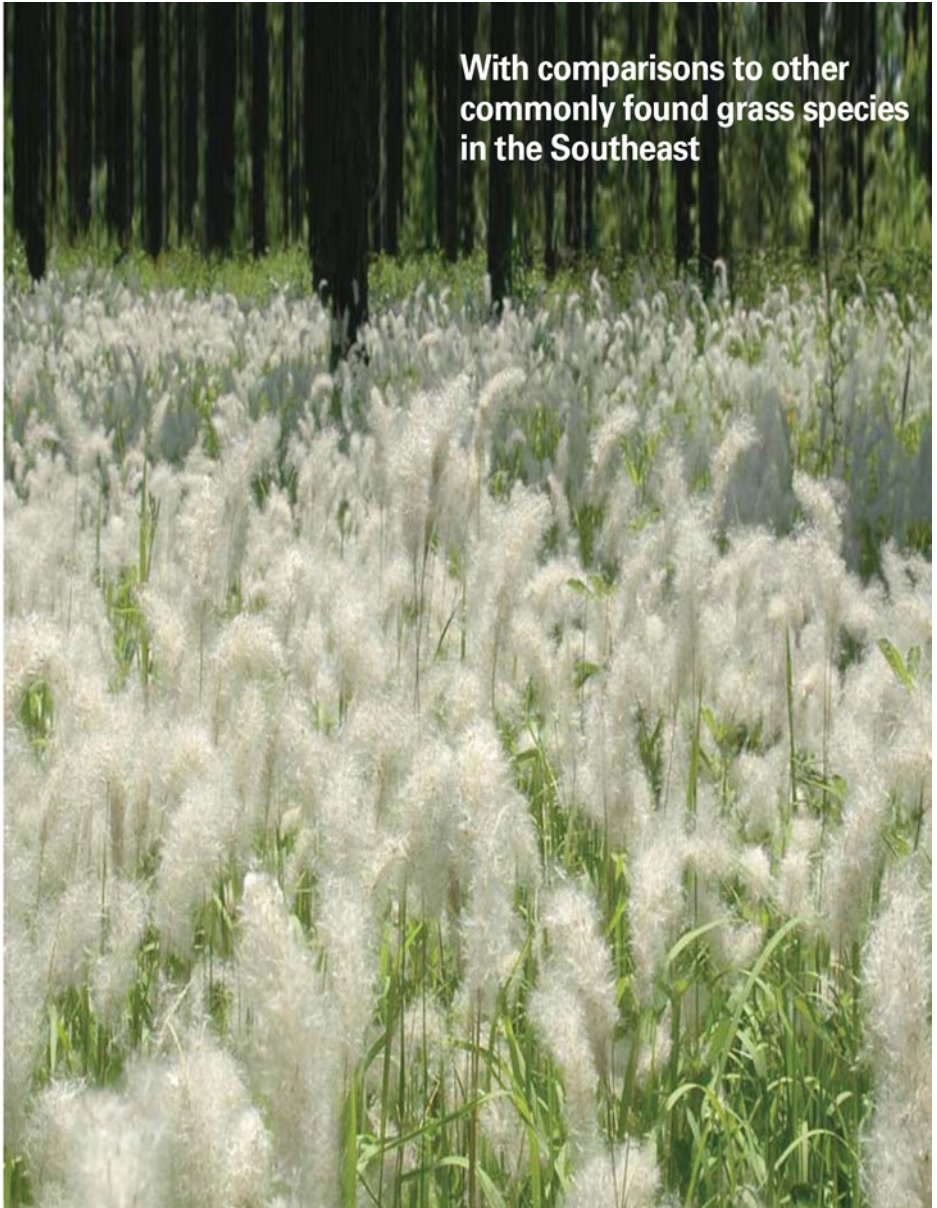
Georgia Forestry Commission

University of Georgia

U. S. Forest Service

# Field Guide to the Identification of Cogongrass

**With comparisons to other  
commonly found grass species  
in the Southeast**



Cogongrass (*Imperata cylindrica*) is an aggressive invader of natural and disturbed areas throughout the Southeast. It disrupts ecosystem functions, reduces wildlife habitat, decreases tree seedling growth and establishment success, and alters fire regimes and intensity. Recognizing the presence of cogongrass is necessary before beginning any management activities. While other species may look similar, cogongrass has a unique combination of characteristics that make field identification possible. This field guide describes and illustrates these characteristics and compares them to other grass species commonly found in similar habitats. Easy-to-understand terminology is used when possible, and definitions for technical terms are provided below. Cogongrass is a Federal Noxious Weed and any infestation must be identified by the appropriate state or federal authority. If you think you have cogongrass on your land, please contact your state department of agriculture or USDA-APHIS office. For more information of cogongrass ecology and control, visit [www.cogongrass.org](http://www.cogongrass.org).

### **Scientific Names of Compared Species**

- Vasey grass (*Paspalum urvillei*)
- Johnsongrass (*Sorghum haplense*)
- Silver beardgrass (*Bothriochloa laguroides*)
- Broomsedge (*Andropogon virginicus*)

### **Definitions**

**Ligule** - Small projection at the base of a leaf blade

**Leaf sheath** - lower portion of the leaf which encloses the stem

**Collar region** - junction of the leaf blade with the leaf sheath

**Flower/Seed head** - entire group of flowers or seeds attached to flower stalk

**Rhizome** - Underground stem which often roots at nodes (often thicker and more fleshy than roots)

### **Citation**

Evans, C.W., D.J. Moorhead, C.T. Barger, and G.K. Douce. 2008. Field Guide to the Identification of Cogongrass: With comparisons to other commonly found grass species in the Southeast. The University of Georgia Center for Invasive Species and Ecosystem Health, Tifton GA, BW-2008-02. 20 p.

## Key Identification Features of Cogongrass

### Flower/Seed head

- Cylindrical in shape
- 2-8 inches in length (total flower or seed head)
- Silvery white in color
- Light fluffy dandelion-like seeds
- Blooms from late March to mid June (flower timing depends somewhat on local climate)



### Leaves

- Blades up to 6 feet long
- About 1 inch wide
- Whitish, prominent midrib, that is often off center
- Margins finely serrate
- Some leaves are very erect, but some may droop or lie flat
- Often light yellowish-green in color
- Could have a reddish cast in fall/winter or brown after frost or freeze



# Key Identification Features of Cogongrass

## Plant Base

- No apparent stem
- Leaves appear to arise directly from or close to the ground
- Overlapping sheaths give a rounded appearance to the plant base
- All vegetation doesn't arise from one dense clump, instead the plants are more spread out
- Light-green to yellowish in color, or could be reddish
- Often a lot of thatch around base



## Leaf collar/Ligule

- Ligule is a thin-fringed membrane
- Leaf sheaths overlapping, giving the plant a round appearance
- Hairy (the ligule is the most hairy part of the plant, the plant base may also be somewhat hairy)



# Key Identification Features of Cogongrass

## Rhizome/Roots

- Dense mat
- Many sharp points
- Covered in flaky scales
- Bright white under scales
- Strongly segmented



Rhizomes with scales removed (top) and intact (bottom)



## Whole Plant

- Densely growing patches
- Tall grass (up to six feet, averaging 3-4 feet)
- Circular infestations
- Plants often turn brown in winter (at least partially, but may depend on local climate)



## Cogongrass Infestation Identification



C. Evans, UGA

**Forest - Flowering**



C. Evans, UGA

**Forest - Non-flowering**



C. Evans, UGA

**Forest - Dormant Season**



D. Moorhead, UGA

**Utility Rights-of-way**

# Cogongrass Infestation Identification



**Circular - Flowering**



**Circular - Non-flowering**



**Open Area - Sparse Flowering**



**Open Area - Dense Flowering**



**Roadside - Flowering**



**Roadside - Non-flowering**



**Aerial View**

# Cogongrass - Flower and Seed Head Comparison



C. Evans, UGA



C. Evans, UGA

## Flower/Seed head

- Cylindrical in shape
- 2-8 inches in length (total flower or seed head)
- Silvery white in color
- Light, fluffy dandelion-like seeds
- Blooms from late March to mid June (flower timing depends somewhat on local climate)



C. Evans, UGA





J. Bodner, SWSS

UGA1120357

### Vasey Grass

Flower/seed head not fluffy, but loosely branched and spreading.



J. Byrd, MSU

UGA1391336

### Silver Beardgrass

Very similar in looks, but often somewhat branched and blooms later in the year (June-August).



J. Miller, USFS

UGA1120287

### Broomsedge

Flower/seed head is thin and sparsely flowered, blooms late summer.



J. Miller, USFS

UGA1120383

### Johnsongrass

Flower/seed head not-fluffy, but loosely branched and spreading.

# Cogongrass - Leaf Collar and Ligule Comparison



## Leaf collar/Ligule

- Ligule is a thin-fringed membrane
- Leaf sheaths overlapping, giving the plant a round appearance
- Hairy (the ligule is the most hairy part of the plant, the plant base may also be somewhat hairy)



C. Evans, UGA



C. Evans, UGA

### Vasey Grass

Only membranous ligule is hairy, leaf collar flared, giving the region a less rounded look.



J. Byrd, MSU



J. Byrd, MSU

### Silver Beardgrass

Collar region hairless except for ligule, which has sparse long hairs.



D. Moorhead, UGA



D. Moorhead, UGA

### Broomsedge

Sheath is somewhat hairy, ligule is covered in numerous long thin hairs.



C. Evans, UGA



C. Evans, UGA

### Johnsongrass

Smooth collar, not hairy except for a small white hair-patch behind the ligule.

## Cogongrass - Leaf Comparison



UGA1334120

C. Evans, UGA

### Leaves

- Blades up to 6 feet long
- About 1 inch wide
- Whitish, prominent midrib, that is often off-center
- Margins finely serrate
- Some leaves are very erect, but some may droop or lie flat
- Often light yellowish-green in color
- Could have a reddish cast in fall/winter or brown after frost or freeze



UGA2307192

L. Bodner, SWSS



UGA2152036

C. Evans, UGA

## Vasey Grass

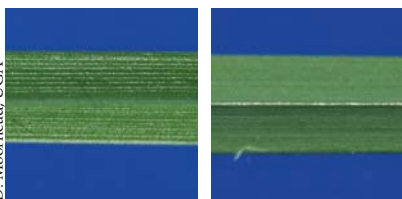
Leaves arise from apparent stem, and serrations are not as obvious.



J. Byrd, MSU

## Silver Beardgrass

Leaves are not serrated and arise from an apparent stem. Midrib not as apparent.



D. Moorhead, UGA

D. Moorhead, UGA



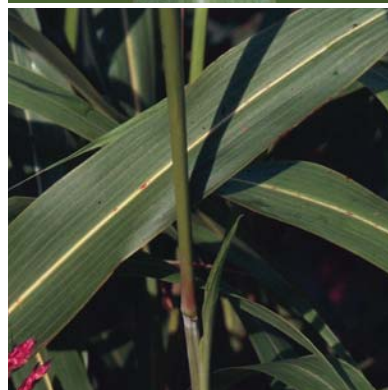
D. Moorhead, UGA

## Broomsedge

Leaves are thin and often curled, and arise from apparent stem.



C. Evans, UGA



T. Bochner, SWSS

## Johnsongrass

Leaves wider than cogongrass, edges are not serrate.

# Cogongrass - Plant Base Comparison



K. Carter, VSU



J. Miller, USFS



J. Miller, USFS

## Plant Base

- No apparent stem
- Leaves appear to arise directly from or close to the ground
- Overlapping sheaths give a rounded appearance to the plant base
- All vegetation doesn't arise from one dense clump, instead the plants are more spread out
- Light-green to yellowish in color, or could be reddish
- Often a lot of thatch around base



C. Evans, UGA



C. Evans, UGA

## Vasey Grass

Base thick and flattened, often with a reddish-purple color. Plant is very bunched in appearance.



D. Moorhead, UGA

## Broomsedge

Plant base has a strongly bunched appearance, with very apparent stems.



C. Evans, UGA

## Silver Beardgrass

Plant base has a strongly bunched appearance, with apparent stems.



C. Evans, UGA

## Johnsongrass

Plant base also rounded, but very thick in comparison to cogongrass. Plant does not appear bunched.

# Cogongrass - Rhizome and Root Comparison



C. Evans, UGA



UGA2155059

J. Byrd, MSU



C. Evans, UGA

## Rhizome/Roots

- Dense mat
- Many sharp points
- Covered in flaky scales
- Bright white under scales
- Strongly segmented



C. Evans, UGA





UGA2152032

C. Evans, UGA

## Vasey Grass

Thin root system, not extensive and lacking thick, segmented rhizomes.



C. Evans, UGA

## Silver Beardgrass

Root system fibrous, lacking rhizomes.



D. Moorhead, UGA

## Broomsedge

Root system fibrous, lacking rhizomes.



UGA1459237

S. Dewey, USU

## Johnsongrass

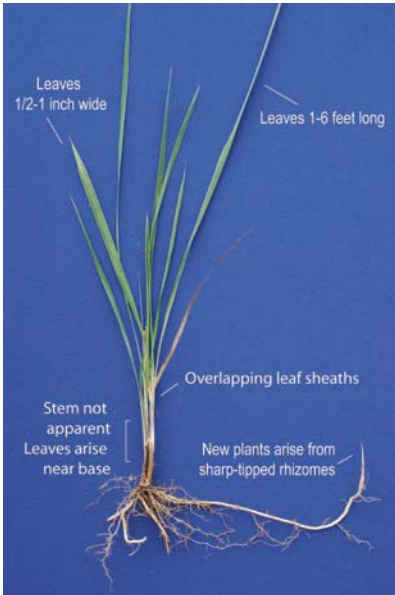
Rhizome system not as extensive. Rhizomes lacking scaly coverings.



UGA1459242

S. Dewey, USU

# Cogongrass - Whole Plant Comparison



## Whole Plant

- Densely growing patches
- Tall grass (up to six feet, averaging 3-4 feet)
- Circular infestations
- Plants often turn brown in winter (at least partially, but may depend on local climate)





**Vasey Grass**



**Silver Beardgrass**



**Broomsedge**



**Johnsongrass**

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THE UNIVERSITY OF GEORGIA  
**CENTER FOR INVASIVE SPECIES  
AND  
ECOSYSTEM HEALTH**  
WARRELL SCHOOL OF FORESTRY AND NATURAL RESOURCES      COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES

