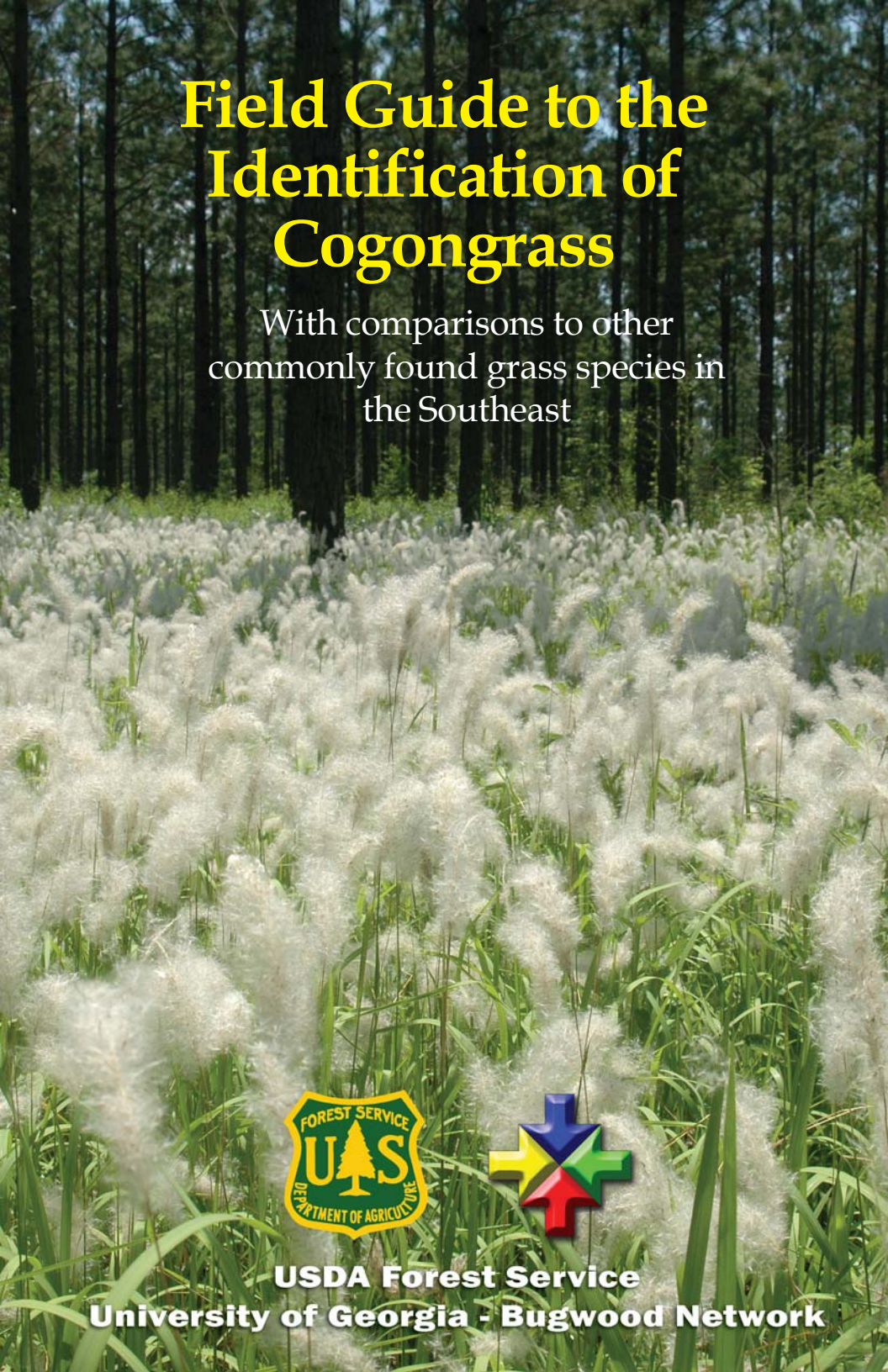
Field Guide to the Identification of Cogongrass

With comparisons to other commonly found grass species in the Southeast



USDA Forest Service
University of Georgia - Bugwood Network

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 common 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.

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. Bargeron, and G.K. Douce. 2006. Field Guide to the Identification of Cogongrass: With comparisons to other commonly found grass species in the Southeast. The University of Georgia Bugwood Network, Tifton GA, BW-2006-04. 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)

C. Evans, UGA


M. Atwater

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

C. Evans, UGA

T. Bodner, SWSS

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

J. Miller, USFS


R. Carter, VSU


J. Miller, USFS

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

Key Identification Features of Cogongrass

Rhizome/Roots

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


C. Evans, UGA

C. Evans, UGA

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

C. Evans, UGA

J. Byrd, MSU

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)

C. Bryson, USDA ARS

J. Lotz, FDOACS

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

C. Bryson, USDA ARS

Circular - Flowering

M. Atwater

Circular - Non-flowering

J. Meeker, USFS

Open Area - Sparse Flowering

J. Byrd, MSU

Open Area - Dense Flowering

C. Bryson, USDA ARS

Roadside - Flowering

W. Faircloth, USDA ARS

Roadside - Non-flowering

G. Leach

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

T. Bodner, SWSS

Vasey Grass

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

J. Byrd, MSU

Silver Beardgrass

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

J. Miller, USFS

Broomsedge

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

J. Miller, USFS

Johnsongrass

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

Cogongrass - Leaf Collar and Ligule Comparison

C. Evans, UGA

C. Evans, UGA

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

C. Evans, UGA


D. Moorhead, UGA

C. Evans, UGA

Broomsedge

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

Johnsongrass

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

Cogongrass - Leaf Comparison

C. Evans, UGA

Leaves

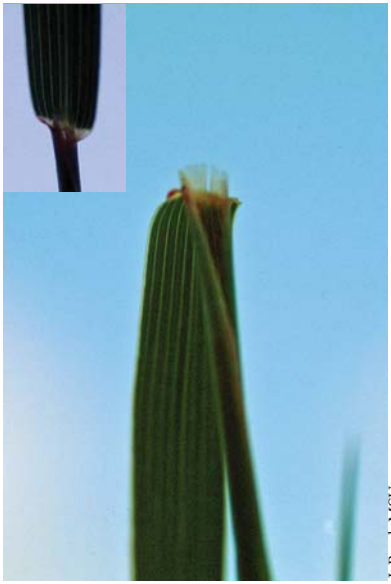
- Blades up to 6 feet long
- About 1 inch wide
- Whitish, prominent midrib, that is often off center
- Margins finely serrate
- Some leaves are very erect, but some may droop or lie flat
- Often light yellowish-green in color
- Could have a reddish cast in fall/ winter or brown after frost or freeze

T. Bodner, SWSS

C. Evans, UGA

Vasey Grass

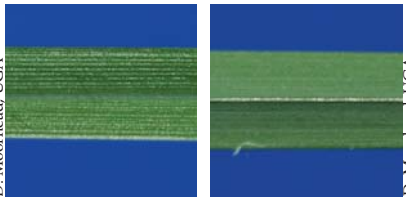
Leaves arise from apparent stem, and serrations are not as obvious



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. Bodner, SWSS

Johnsongrass

Leaves wider than cogongrass, edges are not serrate

Cogongrass - Plant Base Comparison

R. Carter, VSU

J. Miller, USFS

J. Miller, USFS

C. Evans, UGA

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

Vasey Grass

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

C. Evans, UGA

Silver Beardgrass

Plant base has a strongly bunched appearance, with apparent stems

D. Moorhead, UGA

Broomsedge

Plant base has a strongly bunched appearance, with very 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

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

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

S. Dewey, USU

S. Dewey, USU

Johnsongrass

Rhizome system not as extensive. Rhizomes lacking scaly coverings.

Cogongrass - Whole Plant Comparison

C. Bryson, USDA ARS

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)

J. Miller, USDA Forest Service

J. Lotz, FDOACS

T. Bodner, SWSS

Vasey Grass

C. Bryson, USDA ARS

Silver Beardgrass

J. Miller, USFS

Broomsedge

T. Bodner, SWSS

Johnsongrass


Leaves
1/2-1 inch wide
Leaves 1-6 feet long
Overlapping leaf sheaths
Stem not
apparent
Leaves arise
near base
New plants arise from
sharp-tipped rhizomes