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**
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

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

Forest - Flowering

Forest - Non-flowering

Forest - Dormant Season

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

**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)
**Vasey Grass**
Flower/seed head not fluffy, but loosely branched and spreading

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

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

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

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

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

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

**Broomsedge**
Leaves are thin and often curled, and arise from apparent stem

**Johnsongrass**
Leaves wider than cogongrass, edges are not serrate
Cogongrass - Plant Base Comparison

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

Silver Beardgrass
Plant base has a strongly bunched appearance, with apparent stems

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

Johnsongrass
Plant base also rounded, but very thick in comparison to cogongrass. Plant does not appear bunched.
Cogongrass - Rhizome and Root Comparison

Rhizome/Roots
- Dense mat
- Many sharp points
- Covered in flaky scales
- Bright white under scales
- Strongly segmented
**Vasey Grass**
Thin root system, not extensive and lacking thick, segmented rhizomes

**Silver Beardgrass**
Root system fibrous, lacking rhizomes

**Broomsedge**
Root system fibrous, lacking rhizomes

**Johnsongrass**
Rhizome system not as extensive. Rhizomes lacking scaly coverings.
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
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