Cogongrass - *Imperata cylindrica*

**Identification**
Cogongrass is a perennial colony-forming grass up to six feet tall. The clumps of grass arise from the ground, with no apparent stem. The leaf sheaths overlap near the base. The leaves have an off-center midrib that is whitish in color, but this is a variable trait (Figure 59). Leaf margins are finely serrated giving it a sharp texture. Ligules are fringed membranes. The sharp, branched, white rhizomes are concentrated in a dense layer in the top six inches of soil (Figure 60). Flowers and seeds are in a large fuzzy panicle, giving the flowering plant a cottony or silky look. Cogongrass rarely is found as a single plant but quickly forms patches or infestations, often circular in outline (Figure 61).

**Habitat and Distribution**
Cogongrass is native to Southeast Asia and was first introduced into the southeast United States in the early 1900s. Initially cogongrass was planted for forage and erosion control; however it is unpalatable for livestock and not well suited for erosion control due to its aggressive behavior. Cogongrass can invade a wide variety of sites including road sides and rights-of-way, forests, pine plantations, ditches, pastures, field edges, orchards, levees, sand dunes, and waste areas (Figure 62). Cogongrass will not grow in saturated soils, but tolerates periodic flooding reasonably well. It can also tolerate saline environments and drought. It can grow in both deep shade and full sunlight. It cannot successfully invade areas that are annually cultivated. Fire stimulates growth and flower production. Cogongrass can grow in moderately cold weather, being found as far north as the Tennessee border inland and to Connecticut along the coast. Cogongrass is widespread and extremely problematic in Mississippi, Alabama, and Florida. It is currently sparsely located in Louisiana, Georgia, and South Carolina. Cogongrass’ introduced range in the United States is expected to continue to expand.

**Impact**
Cogongrass can form dense mats that exclude all other understory vegetation (Figure 63). Cogongrass has little or no value for wildlife either as food or habitat. Desirable species are displaced and new species are prevented from establishing. Dense infestations restrict tree and shrub establishment. Cogongrass is very flammable and creates fire hazards especially in winter. The thick thatch layer dries quickly and burns very hot. Prescribed and wild fires in infested areas are more intense than in native vegetation (Figure 64), and trees can be damaged or even killed during these fires. Wildlife, including gopher tortoises and indigo snakes, and game species such as bobwhite quail and wild turkey, are negatively impacted by cogongrass and habitats may be completely lost due to heavy infestations.
Response to Disturbance
Promoted by high light environments
Establishes quickly on disturbed sites
Regrows quickly after soil disturbance
Promoted by fire
Re-grows after being cut
Possibly allelopathic
Resistant to most herbicides
Unpalatable

Reproduction
Primary means – seed and rhizome
Matures in less than one year
Abundant seed production (3,000/plant)
High seed germination (90%)
Low seed viability (viability declines sharply after 3 months)
Seed bank less than 6 months
Low seedling survivorship (20% in first year)
Does not self pollinate
Rhizomatous (rhizome biomass up to 16 tons/acre)
Grows well from rhizome fragments (soil transferred)

Seed Dispersal
Wind and soil contaminate
Seed dispersed (up to 15 miles via wind)

Growth Habits
Grass
Perennial
Full sun and deep shade tolerant
Drought tolerant
Not flood tolerant (saturated soil conditions, especially in early establishment)
Cold tolerant (as low as 7 degrees Fahrenheit)
Can grow in varied habitat types

Response to Prescribed Fire
Not a control option, but may be used to reduce thatch before chemical treatment
Fire hazard
Fire stimulates flowering

Control Recommendations
Thoroughly wet all leaves with one of the following herbicides in water with a surfactant:
Arsenal AC as a 2-percent solution (8 ounces per 3-gallon mix), a glyphosate herbicide as a 2-percent solution (8 ounces per 3-gallon mix), or combination of the two herbicides. Apply before flowering in spring to suppress seed production. Apply 32 ounces per acre of Arsenal AC or 64 ounces per acre of Chopper herbicide in late fall for eradication. Mowing or careful prescribed burning of the thatch in late winter can aid herbicide treatments.
(See Herbicide Quick Reference page 40-42)