## COGONGRASS MANAGEMENT IN LONGLEAF PINE

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Cogongrass (*Imperata cylindrica*) infestations in areas where longleaf pine will be or is currently planted presents problems for landowners in that control measures may be marginal and expensive. Three different scenarios can be identified: 1. Infestations in sites not yet planted, 2. Infestations in sites with trees greater that average diameter of 5 inches DBH, and 3. Infestations in sites with young longleaf pine seedlings. PLEASE NOTE that the following information is based in large part on experience gained from establishing loblolly pine in bahiagrass and bermudagrass areas, efficacy of screening trials of herbicides on longleaf pine, and specifications on herbicide labels.

## Situation 1. (site prep prior to planting).

Prescribe burn when possible in late winter prior to the growing season of treatments. Application for two consecutive years using the following mixture in August - October: imazapyr (Arsenal Applicators Concentrate) at 0.5 lb active ingredient per acre (1 pint product) plus a glyphosate herbicide at 4 lb active per acre (4/5 – 1 gallon) with surfactant when specified on the herbicide label . Plant in mid-December through mid-January. Imazapyr should not be applied within 4 months of planting. Treatments should be applied in 15 to 20 gallon of total spray solution by helicopter or 15 to 40 gallons per acre by ground equipment, assuring thorough coverage and overlapping spray swaths.

## Situation 2. (Treatment in established trees with DBH of 5 inches or greater).

Prescribe burn when possible in late winter prior to the growing season of treatments, recognizing that cogongrass must be in a suppressed condition so that flame height and fire intensity does not damage sapling trees. NOTE that burning and herbicide applications can damage the shrub layer needed for cogongrass suppression in conjunction with a tree layer.

Apply a mixture of imazapyr at 0.5 lb active ingredient per acre (1 pint product per acre) plus a glyphosate herbicide at 4 lb active ingredient per acre (4/5 to 1 gallon product per acre) with surfactant in August - October. This must be applied by ground between tree rows and overlap must be avoided. Drift must be minimized to avoid tree damage. NOTE: no research is available to show that this treatment is economically beneficial to the landowner, but will be useful for controlling stands with new and developing infestations.

## Situation 3. (Treatment of young longleaf seedlings for release).

NOTE: Cogongrass must be suppressed with site prep treatments prior to planting in order for this treatment to be effective. Seedlings should NOT be actively flushing and should be hardened off and shoots not actively elongating at application. Apply imazapyr (Arsenal AC) at 0.125 lb active ingredient (4 ounces product per acre) over the top one time from June to September. Make a uniform application to the entire site with overlaps between rows. Use nozzles and setups that minimize application over seedling rows. Apply in 15 to 40 gallons of total solution per acre for tractor and backpack application. DO NOT USE A SURFACTANT WITH THIS TREATMENT.