Invasive Grasses and Canes

Nonnative grasses and bamboos continue to spread along highway rights-of-way and, thus, gain access to adjoining lands. Most nonnative invasive grasses are highly flammable; increase fire intensities, subjecting firefighters to higher risk; and spread rapidly after wildfire or prescribed burns. Invasive grasses have become one of the most insidious problems in the field of wildlife management on pasture and prairie lands because they have low wildlife value and leave little room for native plants. Repeated applications of herbicides are required for control with establishment of native plants. Long established bamboo infestation continue to expand without control treatments.

Bamboos





Golden bamboo (*Phyllostachys aurea* Carrière ex A. Rivière & C. Rivière) and other nonnative bamboos (*Phyllostachys* spp. and *Bambusa* spp.) are perennial infestation-forming canes 16 to 40 feet (5 to 12 m) in height. They have jointed cane stems and bushy tops of lanceolate leaves in fan clusters on jutting branches, often golden green. Plants arise from large branched rhizomes, and infestations rapidly expand after disturbance. Seeds rarely, if ever, produced—potentially once every 50 to 100 years. Still sold and planted as ornamentals. Bamboos are very difficult to eradicate. Resemble switch-cane [*Arundinaria gigantea* (Walter) Muhl. and other *Arundinara* spp.], the only native bamboolike canes in the South, distinguished by a lower height—usually only 6 to 8 feet (2 to 2.5 m)—and persistent sheaths on the stem and absence of long opposite horizontal branches. Also resemble the invasive giant reed (*Arundo donax* L.) described in this book.

Management strategies:

- Do not plant. Remove prior plantings.
- Bulldoze and root rake to excavate root crowns and rhizomes, pile, and burn. Caution: Do not bulldoze bamboo infestations where blackbird species frequently roost because the infectious fungus, **histoplasmosis** can be present in the soil and cause deadly lung infections.
- Repeated cutting to groundline will not yield control but can assist herbicide applications to resprouts.
- Burning treatments are suspected of having minimal topkill effect due to scant litter.

Recommended control procedures:

- Cut large stems and apply foliar sprays to resprout tips when plants are 3 to 4 feet tall, or use restricted spray nozzles and increased spray pressures to treat leaves as high as possible. When damage of nontarget plants is a concern, repeatedly apply a glyphosate herbicide as a 10-percent solution (1 quart per 3-gallon mix) in water with a surfactant. When there are no concerns of nontarget plant damage, thoroughly wet all leaves and sprouts with Arsenal AC* as a 1-percent solution (4 ounces per 3-gallon mix) in water with a surfactant. For greatest effectiveness, use a combination of the two herbicides. Treat in September or October with multiple applications to regrowth when adequate foliage is present.
- Cut just above ground level between stem sections and immediately apply into the stem cup a double-strength batch of the same herbicide or herbicide mixture in September or October.
- For treatment of extensive infestations in forest situations, apply Velpar L* to the soil surface as spots in a grid pattern at spacings specified on the herbicide label at 2 gallons of herbicide per acre.

* Nontarget plants may be killed or injured by root uptake.