

Guide to Self-Led Johnsongrass, Bamboo & Giant Cane Management Workday

Your responsibilities

- Have an approved restoration plan
- Submit [form](#) to parksvolunteer@austintexas.gov 30 days prior to event
- Establish, in agreement with Park Manager, location for the removed plant material
- Estimate volunteer needs (2 units minimum suggested in 2-hour shifts; 1 unit = 2 hours with 15 volunteers)
- Recruit volunteers. Keep Austin Beautiful and Austin Parks Foundation can provide support with this process.
- Coordinate information/training tasks
- Give safety orientation
- Provide work gloves, hand pruners, bags. Keep Austin Beautiful and Austin Parks Foundation can provide support with this process.
- Cleanup and organize removed plant material

Volunteer profile, age range: Activity appropriate for 10+ years old for johnsongrass and 15+ years old for giant cane and bamboo (volunteers under 18 years require adult supervision).

Volunteers must have received training on identifying johnsongrass, giant cane, and/or bamboo (training on site is OK).

Volunteers must demonstrate having ability to safely handle/use hand pruners (training on site is OK)

Clothes and safety: Closed-toe shoes, adequate drinking water, sun protection, poison ivy protection

Tools/Supplies: poison ivy block, poison ivy wash, gloves, pruners, loppers, lawn bags, invasive plant ID guides

Background

Johnsongrass (*Sorghum halepense*), golden bamboo (*Phyllostachys aurea*), and giant cane (*Arundo donax*) are invasive grasses that crowd out native plants, particularly in riparian areas. Ecological restoration is a long-term process. Control of exotic invasive species is only a part of this process and must be done gradually, particularly in areas with high densities on exotic invasive plants. Areas where invasive species are managed need to be seeded with native grasses and wildflowers. Tree seedling planting and/or seed bank enrichment are crucial to restore the native plant community, especially in areas with very little growth of native vegetation.

Johnsongrass is easily identified by its wide leaf blade with white stripe down the center. It is hard to control in open grasslands due to its long term seed viability and extensive root system. However, because it is a



Johnson grass

species that does not tolerate shade, once trees and shrubs outgrow it, it will not be a dominant species in

areas with full canopy. Constant removal of johnsongrass helps reduce its competitive ability against native tree saplings while they are growing. Removal requires manually pulling as much of the root system as possible with continued follow-up. Seed heads need to be removed to decrease further spread. Mid-spring is the best time to start removing johnsongrass, before it produces seeds. Continue removing monthly during the growing season. This will force the plants to exhaust their reserves every time it tries to grow. The above-ground portion of the plants often dies back in winter due to freezes, making locating/identifying plants difficult at this time of year.

Golden bamboo has fan-like cluster leaves and jointed stems. **Giant cane**, “Arundo”, is identified by alternate pointed leaves with bases that envelope the stem. Both species have extensive underground root structures



Bamboo



Giant Cane

that sprout when the aboveground parts are removed. Large areas infested with bamboo and giant cane are difficult to control. Small patches (100 sq ft or less) of bamboo and giant cane can be successfully managed with repeated manual removals, especially if roots systems are removed (only on gentle slopes and flat areas). If your site has an area larger than 100 square ft, a coordinated effort that includes very specific and targeted chemical treatment will likely be needed. Contact John Clement at john.clement@austintexas.gov for information on the requirements.

Day of event, removing johnsongrass, giant cane and/or bamboo

Note: Positively identify invasive plants before removing. Refer to www.austintexas.gov/invasive

Johnsongrass

- Hand dig the plants, including as much of the roots as possible in areas with gentle slopes (less than 3:1).
- If seeds have **NOT** formed, removed plants can be laid on the ground as mulch. If seeds **are already formed**, even if green, bag seed heads to minimize reseeding.

Giant Cane and Bamboo

- Hand dig small plants in areas with gentle slope (less than 3:1) and cut large plants to the base of the plant. Plants must be cut as close to the ground as possible, with a horizontal cut. Diagonal cuts create a hazard for park users.
- Cutting these plants once will have little impact on the infestation, so plan for monthly follow up workdays (or every other week if possible) to remove regrowth.



- Giant cane cuttings cannot be left on site; they can readily grow roots and re-establish. All cuttings need to be piled up in an orderly fashion, ready for pick-up. Piles must be not taller than 3' and must be placed at least 5' apart from each other. This location **must be agreed upon** through communication with PARD manager **prior to the event day**.

Workday follow up should include replanting and/or seeding (refer to Self-led Guide to Seeding).

Provided by Parks and Recreation Department

Retrieval of bamboo and/or giant cane cuttings and/or bags with johnsongrass. Location for staging plant material **MUST** be agreed upon with Park manager **PRIOR** to event day.

Provided by Watershed Protection Department

Support and guidance through development of a restoration plan. Assist with initial site visit to help determine area extent, scope, and potential follow-ups of the project.