Giant reed

Colorado Department of Agriculture

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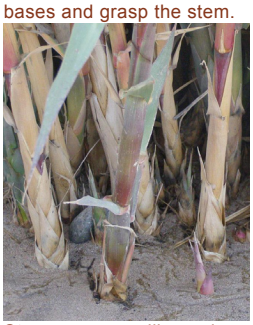
Leaves have heart-shaped bases and grasp the stem.



Stems are cane-like and spread through rhizomes.

Seed heads can be 3 ft long but seeds are rarely viable.

Photos from top: Amy Ferriter, State of Idaho; Bonnie Million, National Park Service; and Chris Evans, River to River CWMA (www.invasive.org)

Key ID Points

1. Large bamboo-like grass that can grow over 20 ft tall.
2. Seed heads can reach 3 ft in length but rarely produce viable seeds.

Giant reed Identification and Management

Giant reed in a Denver neighborhood. Photo by Cindy Lair, CDA.

Please contact the Colorado Department of Agriculture to report a sighting.

Identification and Impacts

Giant reed (*Arundo donax)* is a robust perennial grass that can grow over 20 ft tall. Each plant has many stiff and hollow stems that form cane-like clumps and spread vegetatively through rhizomes. The stems resemble corn stalks and have long, flat leaves up to 1.5 ft long that can appear variegated. The alternate leaves are pale green to blue-green and clasp the stem with a heart-shaped base. Flowers form in dense plumes at the top of the stalks from late summer to early fall. The flower plumes themselves can reach 3 ft in length.

Giant reed is native to India and spreads primarily through underground rhizomes. It can be found growing in wetland areas such as ditches, stream banks and lake shores and has the ability to reduce wildlife habitat, increase fire risk, and interfere with flood control. It can quickly suppress and out-compete native vegetation due to its rapid growth rate and lateral root system, but it does not appear to tolerate high-elevations or continental environments where regular freezing occurs. It prefers well-drained soils where abundant moisture is available. Seeds are mostly infertile, but stem and root fragments less than 2 in long that contain a single node can easily sprout. Therefore, monitoring of sites where giant reed has been treated should continue for at least 5 years after treatment to ensure that re-growth has not occurred.

The key to effective control of giant reed is to prevent it from establishing through proper land management. Maintain healthy wetlands, streams, and ditches, and continually monitor your property for new infestations. The following page provides management recommendations for Giant reed.

Giant reed is designated as a "List A" species in the Colorado Noxious Weed Act. It is required to be eradicated wherever found in the state. For More information visit: www.colorado.gov/ag/weeds or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division at 303-239-4100.

Vegetative reproduction from stem fragment. Photo: Joseph M. DiTomaso, University of California at Davis.

Arundo donax

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Management Recommendations

CULTURAL
Cultural controls include management practices that favor the growth of desirable species over noxious weeds. These types of control are possible in theory but can be time consuming and expensive. Complete removal of any seedlings or newly established plants by continual hand pulling is also possible.

BIOLOGICAL
Biocontrol agents are not included in the prescribed management plans by the State. Eradication is the management objective of all List A's. No biocontrol agent for giant reed is available. For more information on biocontrol in Colorado, please contact the Palisade Insectary of the Colorado Department of Agriculture at 970-464-7916.

MECHANICAL
Physically digging up adult plants can be done but is not recommended due to giant reed's ability to reestablish from root fragments. Giant reed is highly flammable, and controlled burning followed by herbicide treatment has been shown to be an effective control technique. However, burning of giant reed for control is not currently recommended in Colorado.

Integrated Weed Management:

Preventing the further establishment of this plant in Colorado is crucial since only a few populations are known in the state. Monitoring your land for infestations, especially lands along the Front Range of Colorado, where giant reed is present, can significantly aid in detecting the species early and eradicating it quickly.

Herbicide timing is important in controlling this species. Follow timing guidelines.

Giant reed

HERBICIDES

NOTE: The following are recommendations for herbicides that can be used to treat giant reed. Please note the specific area where each recommendation applies. Rates are approximate and based on equipment with an output of 30 gal/acre. Please read label for exact rates. **Always read, understand, and follow the label directions. The herbicide label is the LAW!**

Herbicide	Rate	Application Timing
Glyphosate* (Rodeo, AquaMaster, AquaNeat: all safe for aquatic use)	2-4 qt./acre + 0.25% v/v non-ionic surfactant OR 2% v/v product + 0.25% v/v non-ionic surfactant for spot spraying	Apply foliar application when plants are actively growing (late summer to fall). May require several years of treatment.
Imazapyr** (Arsenal*, Stalker*, Habitat*)	1-2 qt./acre	Apply to foliage until wet (but not dripping) while plants are actively growing (late summer to fall).
Note: *These herbicide products are nonselective and will kill any vegetation contacted. **Imazapyr is NOT recommended for use in ornamental or turf settings.		
Additional herbicide recommendations for other species can be found at: www.colorado.gov/agconservation/CSUHerbicideRecommendations.pdf		

Photos, top to bottom: Kelly Uhing, Colorado Department of Agriculture: University of Idaho Archive, Bugwood.org; and Barbara Tokarska-Guzik, University of Silesia, Poland.