Giant Reed

Arundo donax L. Grass family (Poaceae)

NATIVE RANGE

India

DESCRIPTION

Giant reed, also known as wild cane, is a tall, perennial grass that can grow to over 20 feet in height. Its fleshy, creeping rootstocks form compact masses from which tough, fibrous roots emerge that penetrate deeply into the soil. Leaves are elongate, 1-2 inches wide and a foot long. The flowers are borne in 2-foot long, dense, plume-like panicles during August and September.

ECOLOGICAL THREAT

Giant reed chokes riversides and stream channels, crowds out native plants, interferes with flood control, increases fire potential, and reduces habitat for wildlife, including the Least Bell's vireo, a federally endangered bird. The long, fibrous, interconnecting root mats of giant reed form a framework for debris dams behind bridges, culverts, and other structures that lead to damage. It ignites easily and can create intense fires.



Giant reed can float miles downstream where root and stem fragments may take root and initiate new infestations. Due to its rapid growth rate and vegetative reproduction, it is able to quickly invade new areas and form pure stands at the expense of other species. Once established, giant reed has the ability to outcompete and completely suppress native vegetation.



DISTRIBUTION IN THE UNITED STATES

Giant reed is distributed from Arkansas and Texas to California, where it is found throughout the state, and in the east, from Virginia to Kentucky and Missouri and generally southward.

HABITAT IN THE UNITED STATES

Giant reed becomes established in moist places such as ditches, streams, and riverbanks, growing best in well drained soils where abundant moisture is available. It tolerates a wide variety of conditions, including high salinity, and can flourish in many soil types from heavy clays to loose sands.

BACKGROUND

Giant reed was probably first introduced into the United States at Los Angeles, California in the early 1800's. Since then, it has become widely dispersed into all of the subtropical and warm temperate areas of the world, mostly through intentional human introductions. Today, giant reed is widely planted throughout the warmer areas of the United States as an ornamental and in the Southwest, where it is used along ditches for erosion control.

Giant reed has a variety of uses ranging from music to medicine. Primitive pipe organs were made from it and the reeds for woodwind instruments are still made from its culms, for which no satisfactory substitutes are known. It is also used in basketry, for fishing rods, livestock fodder, medicine, and soil erosion control.

BIOLOGY & SPREAD

Reproduction of giant reed is primarily vegetative, through rhizomes which root and sprout readily. Little is known about the importance of sexual reproduction in giant reed, or about its seed viability, dormancy, and germination, and seedling establishment. Research on these topics may yield some additional improvements in the management of giant reed.

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MANAGEMENT OPTIONS

Areas infested with giant reed are best restored through chemical means. Mechanical control (e.g., repeated mowing) may be somewhat effective, but if small fragments of root are left in the soil, they may lead to reestablishment.

Chemical

Systemic herbicides, such as glyphosate (e.g., Rodeo®), may be applied clumps of giant reed, after flowering, either as a cut stump treatment or as a foliar spray. When applying herbicides in or around water or wetlands, be sure to use products labeled for that purpose to avoid harm to aquatic organisms.

Fire

Prescribed burning, either alone or combined with herbicide applications, may be effective if conducted after flowering.

Once giant reed has been reduced sufficiently, native plants may be seeded or transplanted at the treated site.

USE PESTICIDES WISELY: Always read the entire pesticide label carefully, follow all mixing and application instructions and wear all recommended personal protective gear and clothing. Contact your state department of agriculture for any additional pesticide use requirements, restrictions or recommendations.

NOTICE: mention of pesticide products on this page does not constitute endorsement of any material.

CONTACTS

For more information on the management of giant reed, please contact:

- Team Arundo del Norte; http://www.ceres.ca.gov/tadn
- Tom Dudley; tdudley at socrates.berkeley.edu

SUGGESTED ALTERNATIVE PLANTS

Native plant species that are adapted to local conditions should be used in restoration projects and as a substitute for giant reed in landscapes and erosion control practices.

OTHER LINKS

- http://www.invasive.org/search/action.cfm?q=Arundo%20donax
- http://www.hear.org/starr/hiplants/images/thumbnails/html/arundo_donax.htm

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