

Giant Reed – An Unwanted Grass

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Riparian areas make up only one to three percent of the acreage you own but they are often the most beautiful acres on a farm or ranch. In all of Texas and especially the Texas Hill Country, when shopping for land to purchase, you will certainly pay a premium for land with a flowing creek or river. Unfortunately, there is an invader to these riparian areas that is attempting a take-over of your water areas. Left unchecked, this invader will choke out native vegetation and make access to the riparian areas impossible. This invader is an introduced grass called giant reed, *Arundo donax*, though it goes by many aliases – Georgia cane, wild cane and Carrizo cane in south Texas. Outside of bamboo, which is also an introduced plant, giant reed is the tallest grass growing in Texas.

Giant reed produces large cane-like culms that grow 6 to 20 feet tall in dense clumps. The hollow un-branched stems can be up to two inches in diameter. The plants spread from knotty rhizomes and may root from broken pieces of the stems that come in contact with the soil. Leaf blades are 1 ½ to 2 ½ inches wide and 12 to 24 inches long, evenly spaced up the stems and ending with a pointed tip. The leaves and stems are smooth. The white and buff colors in this plant's flowers grow in a compact spike, 12 to 24 inches long. It has not been documented in the United States that the numerous seeds produced are fertile, so then just how does this plant spread? Giant reed produces numerous large, horizontal, underground roots called rhizomes. These rhizomes form large tangled masses of roots that can be several inches in diameter and several feet in length. If the plant is washed out by erosion during a flood event these rhizomes are carried downstream by rushing waters and eventually become trapped by vegetation and sediment, where the rhizomes become rooted in the new location.

Rooting by feral hogs for food or to hide out in the thick cover dislodges some plant parts which take root if in contact with damp soil. Nutria are known to gnaw the stalks to get to the new, tender leaves of giant reed and thereby spread pieces of the stem which then sprout roots and leaves. Giant reed can also be spread by roadside shredding which produces even more plant pieces that can be slung far and wide to again become rooted if the pieces land upon damp soil. It is thought that these plant pieces can be carried for several miles by being trapped in mud or damp grass then fall from the shredder and become rooted in new areas.

While cattle readily graze upon giant reed where it is accessible, there is little benefit in having this invasive plant on your property. The clumps grow dense and larger over time and will crowd out beneficial native plants. Giant reed is common in the Rio Grande River and is one of the reasons for the reduced flow in the river. A landowner in Hill County once told me, "The only good thing about giant reed is that it can hide big snakes and junk cars."

If you notice this plant getting started on your perimeter or in riparian areas, the time to fight it is when it is small and easier to control. There is one chemical treatment that has been proven

effective in killing giant reed, the herbicide Habitat by BASF (SePro) which uses the active ingredient Imazapyr. Treatment should be during the growing season when conditions are good for active growth. The only negative to this chemical treatment is that any desirable vegetation will also be killed by contact with the chemical.

In Texas the Nueces River Authority is taking the fight to the plant where it is found growing along the Sabinal and Upper Nueces Rivers. Treatments have included the use of Habitat on larger colonies and more recently the promotion of a campaign called "Pull. Kill. Plant" This means to pull young sprouts and remove the plant from the riparian areas to dry out where they are then no longer a menace. The Kill refers to the use of the herbicide for control and Plant means to allow the dead stalks of giant reed to remain in place to serve as a nursery for native plants that can be planted or to trap desirable native plants that wash downstream during high flow events.

Once you control the giant reed that is growing on your property you must remain diligent to continue with spot treatments for plants that sprout from surviving rhizomes or that arrive from upstream. This is why a watershed approach to controlling giant reed is very important to achieve success in its control. If all of the landowners along a stream will fight it, the chance of winning this battle is greater. You can find a fact sheet on the 'Pull. Kill. Plant' campaign on the website for the Nueces River Authority. For more information contact Sky Jones-Lewey at the Nueces River Authority. While the march of giant reed across Texas can be slowed, it will take a lot of effort and diligence to remove it from our landscape. Every journey begins with the first step.

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Photo captions:

1 When livestock have access, the leaves of giant reed are palatable and readily eaten.



2 Dense 'cane brakes' are almost impossible to claw your way through leading to unusable acres on your property.



3 Giant reed spreads when high flow events create bank erosion and wash its rhizomes downstream.



4 Seed heads appear from late summer through fall.



5 It is fortunate that the vast number of seeds produced by giant cane in the United States are not viable.



6 Giant reed is spread by shredding along Texas highways or where ever it grows.

