

# Caution: Invasive Species Present

Arundo Grass, or Giant Reed, is a tall perennial grass that can grow to over 20 feet in height. Its species name is *Arundo donax*. It was introduced from Asia, Africa, and Europe in the early 1800's. Since then it has been widely dispersed throughout the Southern United States. There are some practical uses for the reed, such as walking sticks, fishing poles, and musical instruments. It has also been used for erosion control in the U.S. in states like Texas and California.

Like many other good ideas it's hard to look into the future to see the long term effects of the introduction of Arundo into our eco-system. As it turns out this species is very fast growing. It can grow 4 inches a day, and reach its mature height in only 12 months. Arundo grows in very dense clumps which can block out native plants resulting in a diminished food supply that would otherwise be provided to other animals. In addition due to its large size it can choke waterways and interfere with flood control. Unfortunately, Arundo Grass and its related problems are now spreading throughout the Texas Hill Country.

Here are some of the problems that we have with trying to eradicate such an invasive species. Arundo in Texas does not typically propagate from seed. It does reproduce from rhizomes or cuttings. This means that if you simply try to cut the reed down to the ground or dig it up you risk the possibility of spreading clippings around the area thus potentially forming new plants. Growing along the sides of streams and rivers you can see how the progressive reproduction of this plant is inevitable. Don't worry too much, there is one way to combat the Arundo Grass. Through the use of herbicides we are able to kill the entire plant. The only thing that stands in our way of killing the grass forever is to identify its location in our local streams and notify the proper authorities, so that they may spray the correct herbicides.

The purpose of this map is to inventory Arundo Grass growing in Town Creek and Barons Creek in the city of Fredricksburg, TX. This is a prototype developed to examine the best practices to inventory and identify Arundo Grass throughout the Texas hill country. This project was envisioned by the Hill Country Alliance and is part of a service learning project through ACC.

Barons Creek Arundo points were captured by the Hill Country Alliance. Town Creek Arundo points were made by digitizing orthoimagery. Once the Arundo points were made the creeks were segmented into 200 foot sections that snap to existing Arundo. The use of these segments act as a buffer zone to incorporate any new plants that may be growing around the old clumps. Since the imagery used for this purpose was made in 2009 there is good probability of other clumps in the presence of existing ones.

This study's results show that roughly 25% of Barons Creek and 50% of Town Creek include segments denoting the presence of Arundo. These figures are meant only as a base line for future, more in depth, analysis of this growing problem.

