



“Currents” April 2018

Can Certain Plants Harm the River?

Humans have been transporting plants and animals from one region to another for thousands of years. European explorers brought novel specimens back to their countries and settlers often traveled with plants or animals from home to serve as familiar elements in a new land. In many cases, the transplanted species do not survive in their new environment due to lack of adequate food sources or an inhospitable climate. In other cases however, the species thrive and spread throughout the habitat. When this happens, the plant or animal can wreak havoc on the ecology of its new environment and become an invasive species.

Texas is home to several unwanted plants and animals with populations that can be classified as invasive including feral hogs, zebra mussels, nutria, fire ants, Chinese tallow, chinaberry, and Ligustrum which are all commonly found in Kerr County. An additional unwelcome resident is also spreading in our area and threatening the health of the Guadalupe River. *Arundo donax*, also called Carrizo cane or giant reed, is a tall grass with a hollow stem and a light brown feathery plume for a flower. It can grow up to 2 inches per day up to a height of 30 feet and grows in dense colonies. It was first brought from the Mediterranean to North America by early Spanish settlers because of its usefulness for animal forage and as a building material. However, with a decline in human use and lack of natural predators, it has spread. *Arundo* completely dominates some riparian areas along the Rio Grande and is colonizing all Hill Country streams.

The riparian area is a band of dense, native vegetation along a body of water. This zone can be identified by high soil moisture, frequent flooding, and the unique collection of plants and animals found there. The distinct community of soil and vegetation form a network of roots and ground cover that intercept runoff from upland areas and stabilize the river bank. These areas also act like a sponge and have the capacity to store water for sustained release back into the river. As a result, riparian areas improve both water quality and quantity and are essential to a healthy stream.

Arundo is highly invasive and has the potential to significantly damage the health of Hill Country streams and rivers by worsening flooding, displacing native plants, destabilizing banks, contributing to erosion, increasing fire risk, and harboring other invasive species such as feral hogs. UGRA is collaborating with the Texas Parks & Wildlife Department (TPWD) to combat *Arundo* along our waterways through the program “Healthy Creeks Initiative.” It is a voluntary partnership with landowners to protect and improve water quality and habitat health along rivers and creeks in the Guadalupe River watershed. Interested streamside landowners can grant permission for TPWD to coordinate targeted, aquatic-approved herbicide application to *Arundo* on their property. This control method has the least impact on the stream ecosystem and is currently being provided at no cost to landowners in priority areas.

To learn more about the Healthy Creeks Initiative, please contact me and join us for an information session starting at 5:30 pm on Tuesday, May 1st in the UGRA Auditorium at 125 Lehmann Drive in Kerrville. We will have several experts present to answer any questions you may have about

Arundo or participating in the Healthy Creeks Initiative. Please share this date and time with anyone you think may be interested in attending this program as well.

This invasive cane is a widespread threat to our river and streams, but by working together we can help restore healthy stream function and improve habitats in the Upper Guadalupe River watershed. Hope to see you on May 1st.

Let's Keep *Our* River Clean

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