

Invasive Aquatic Plants

Upper Llano River Watershed

Did you know there are several invasive aquatic plants beginning to encroach along the Upper Llano rivers? The elephant ear (*Colocasia esculenta*), giant reed (*Arrundo donax*) and chinaberry (*Melia azedarach*) are three invasive plants that displace native vegetation, alter soil conditions, reduce biodiversity and can even increase local water losses. Texas Tech University Upper Llano River Field Station, Texas Parks and Wildlife Department and landowners collaborating to control these invasives on the South Llano.

ELEPHANT EARS

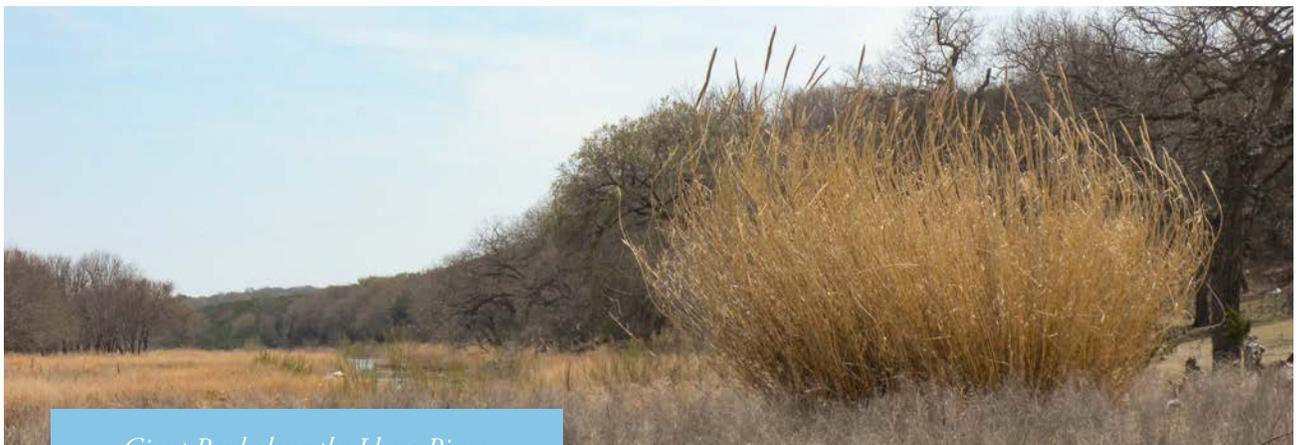
Elephant ears have been documented on approximately 3.6 miles of river along the North and South Llano rivers. These plants are commonly used for ornamental purposes in gardens and ponds. Rises in river level spread the plants downstream. The elephant ears are treated with a hand application of herbicide/surfactant mixture, ensuring no herbicide enters the water.



Herbicides being applied to elephant ears on the South Llano.

GIANT REED

Giant reed was introduced into the United States in the 1800s as ornamental plants and to help control erosion. Water use by the plant is six times that of native riparian species. Approximately 1 mile of the North Llano and less than 1 mile of the South Llano are colonized by giant reed.



Giant Reed along the Llano River.

CHINABERRY

Chinaberry, a member of the mahogany family, was introduced in the mid-1800s as an ornamental plant and can now be found across the Upper Llano watershed. Birds spread chinaberry seeds rapidly by eating the fruit and seeds. The fruit is particularly poisonous to cattle, humans and pets.



Chinaberry foliage. Photo credit: David J. Moorhead, University of Georgia, Bugwood.org

TREATMENT OPTIONS

Elephant ears: Systemic herbicide treatment is most effective since small fragments can reproduce. Hand paint leaves with systemic herbicide/surfactant mixture of AquaNeat, Clearcast and Arsenal.

Giant reed: Chemical treatment is most effective since small fragments can reproduce. Spray application of systemic herbicide.

Chinaberry: The most effective treatment is a combination of mechanical removal and chemical treatment. Hatchet incisions around the trunk or cut stumps should be treated with triclopyr.

PUBLIC RESOURCES

Texasinvasives.org

TPWD Healthy Creeks Initiative: <https://tpwd.texas.gov/landwater/water/aquatic-invasives/hill-country-giant-reed.phtml>

TPWD Management of Elephant Ears: <https://tpwd.texas.gov/landwater/water/aquatic-invasives/llano-elfant-ear.phtml>

PARTNERS

Texas Tech University at Junction Llano River Field Station, Texas Water Resources Institute, Llano River Watershed Alliance, Texas Parks and Wildlife Department, Texas State Soil and Water Conservation Board

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For more information, visit llanoriver.org.