

Precision Aerial Spraying of Saltcedar

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Saltcedar has virtually destroyed much of the native habitat needed by certain birds, other animals and plants along Texas Rivers. It has the ability to change the physical environment giving the plant a competitive advantage over native trees and shrubs. This occurs through increased surface soil salinity, lowered soil water potential, depressed water tables, and increased fire and flood frequency. The Pecos River winds over 400 river miles in Texas before emptying into the Rio Grande near Langtry. Most of this river mileage is armored with dense, mature stands of saltcedar that have created a monoculture. From 1999 through 2003, over 10,000 acres of saltcedar have been treated along the Pecos River and its tributaries using Arsenal (Imazapyr) herbicide. Applications with helicopter using state-of-the-art application technology have resulted in 85-90% mortality of saltcedar trees. Large droplet size, split-boom application, and GPS navigation with flow-control have aided in precision application. Monitoring programs have focused on salinity monitoring, estimates of water use by saltcedar and subsequent water salvage following control.