

# Chinese Privet Control Project



Riparian area with dense Chinese privet understory.



Chinese privet understory after manual cutting.



Bottomland hardwoods with native cane understory.



GyroTrac mulcher cutting Chinese privet.



Manual cutting of Chinese privet with chainsaws.



Understory after GyroTrac mulcher.

## Chinese Privet Problems and Threats

- ✦ An "invasive species" is defined as a species that is,
  - non-native or alien to the ecosystem and
  - whose introduction causes economic and environmental harm.
- ✦ Invasive species can be plants, animals, and other organisms (e.g., microbes),
- ✦ Human actions are the primary means of invasive species introductions,
- ✦ Invasives compete with native species, and this competition affects plant diversity, forest use (e.g. recreation, production), and wildlife,
- ✦ Chinese privet, *Ligustrum sinense*, is the most invasive of the non-native *Ligustrum* species in the Southern US,
- ✦ Chinese privet was introduced from China in the mid-1800's, and established throughout the Southeast by 1930's,
- ✦ An inventory in the 1990's reported privet on 2.9 million acres of the southern region,
- ✦ Chinese privet covers 59% of the Upper Oconee River floodplain (see map of watershed),
- ✦ Chinese privet has invaded our forests where it crowds out native plants.

## This project will test two methods of control:

- ✦ hand cutting followed by herbicide treating of stumps to prevent sprouting and regrowth, and
- ✦ grinding up the privet with a Gyrotrac mulching machine followed by stump treating.

## What are we trying to find out?

Over the next 10 years we will study the effects of Chinese privet on:

- ✦ tree growth,
- ✦ native animals (insects, small mammals and herps), and
- ✦ how the native plant community recovers

PHOTOS:  
USDA Forest Service  
Jim Hanuka & Scott Horn



## Definitions

**Floodplain** - Low, relatively flat land adjoining inland and/or coastal waters, which is subject to periodic flooding.

**Herp** - Reptiles and amphibians. Shortened form of herpetology, which is the branch of zoology dealing with reptiles and amphibians.

**Native species** - Species that is within its known historical range, and there is no evidence of humans having artificially introduced it.

**Overstory** - The upper canopy layer; the plants below comprise the understory.

**Riparian zone/riparian area** - The area of land on either side of streams, channels, rivers, and other water bodies. These areas are normally distinctly different from the surrounding lands because of unique

soil and vegetation characteristics (e.g., wetter soil than adjacent soil conditions where aquatic vegetative communities thrive).

**Understory** - The trees and woody shrubs growing beneath the overstory in a stand of trees.

## Additional Resources

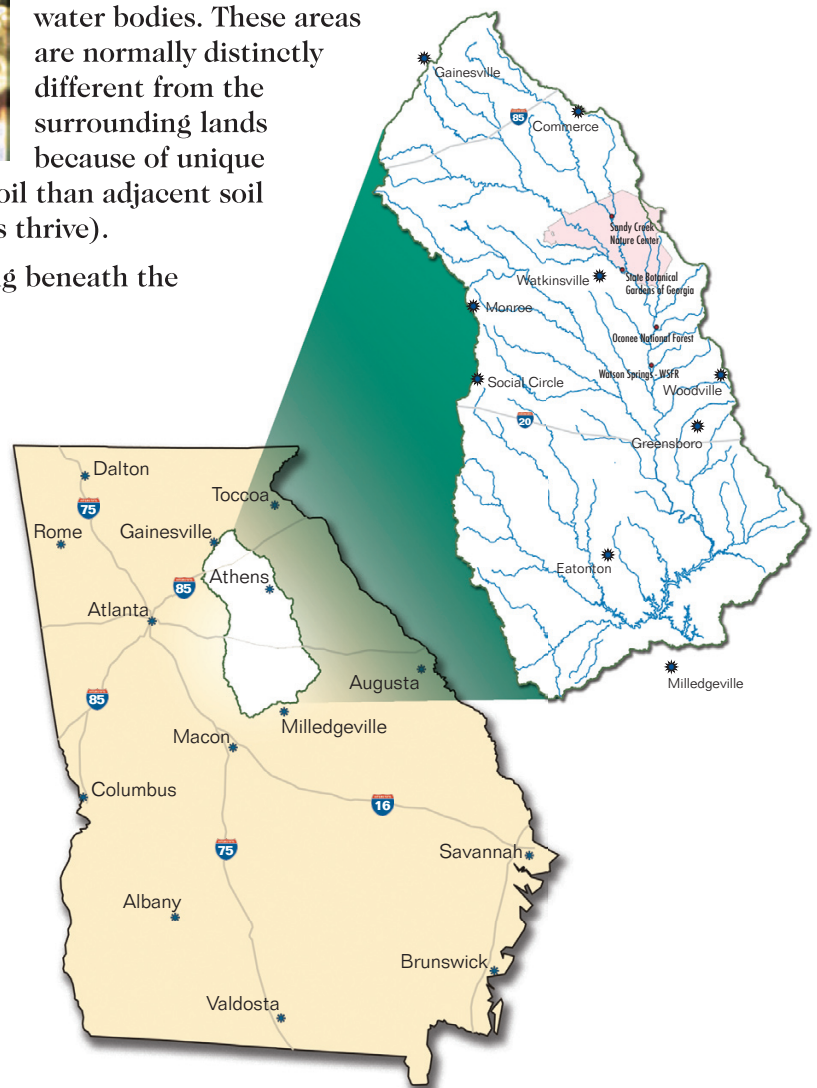
*Nonnative Invasive Plants of Southern Forests A Field Guide for Identification and Control*, James H. Miller, USDA Forest Service, Southern Research Station GTR SRS-62, August, 2003.

*Southeast Exotic Pest Plant Council (SE-EPPC)*  
<http://www.se-eppc.org/>

### Project Contacts:

Jim Hanula, USDA Forest Service  
 jhanula@fs.fed.us

Scott Horn, USDA Forest Service  
 shorn01@fs.fed.us



## Partnership



The USDA Forest Service, Sandy Creek Nature Center, The Botanical Garden of Georgia, and the University of Georgia's Warnell School of Forest Resources are cooperating on a study of methods for control of this weedy pest.