Hunnicutt Creek Restoration and Enhancement
Perspectives and Preliminary Results From A Campus Project

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Overview

- Project Background
  - Watershed characterization

- Project Implementation
  - Research integration
  - Construction
  - Setbacks

- Preliminary Results
  - Data
  - Integrated projects

- Conclusions
Background

- Legacy of opportunistic faculty involvement with Hunnicutt Creek
- Compensatory mitigation opportunity - Jan 2012
- Clemson Experiment Station grant - $156,000
Hunnicutt Invasive Control

Research Plan

Assess and compare impacts of differing invasive management strategies

- CVS Plots
- 5 Treatments

Control  Herbicide  Mechanical  Mechanical & Herbicide  Goats

Control, Herbicide, Mechanical, Mechanical & Herbicide, Goats are mentioned as possible treatments for invasive control.
Goat Prescribed Grazing

Prescribed Grazing
IN PROGRESS

University brings in goats to rid nearby creek of "plant invaders"
Goat Prescribed Grazing Video
Why Control Invasive Species?

- **An invasive species** is a plant or animal that is not native to a specific location.
- Invasive species often have no natural predators or controls and have a tendency to spread.
- When an invasive species spreads through a native ecosystem, it competes with the native species for resources.
- All native species occupy a niche. A niche represents the role of that organism in its environment. In a balanced ecosystem, all of the niches are filled.
- Invasive species disrupt the niches of the native organisms, and thus degrade the ecological integrity and functioning of the ecosystem.
Kudzu is a prime example
Most were deliberately introduced

Kudzu, brought to this country from Asia as an ornamental, was developed near here in the early part of the Twentieth Century and given to the world as a soil-saving, high-protein forage plant by Mr. and Mrs. C. E. Pleas. The fast-growing, deep-rooted leguminous vine has been widely grown in the United States as a drought-resisting, erosion-controlling plant that compares with alfalfa in pasture and hay-making values.
The Process

• Identify the invasive species
• Identify the native species and do an inventory before you begin
• Try to understand how the invasive species got a foothold
• Minimize soil disturbance during restoration thinning
• Consider using herbicides if necessary
• Take advantage of volunteer energy
Habitat degraded by Invasives
What it should look like
Most of this was Silverthorn
Group 1 with handtools
Safety Glasses and Gloves required
Hard work
To get it all, lots of intense work
Group 2 Before
Group 2 After
After 4 groups, this hillside is clear