

WORMSLOE PLANTATION

Restoration of a Longleaf Pine / Wiregrass Community

Savannah, Georgia

A team of fourteen students (twelve landscape architecture and two ecology graduate students) took on the challenge of determining a restoration plan for the land conversion of Wormsloe Plantation's longleaf pine savanna ecosystem in a 48-hour charrette format. This ecosystem is one of the most highly threatened in the United States, having been extirpated from 97% of its original settlement range. In addition, the ecosystem provides a crucial habitat for more than thirty endangered species. Longleaf pine savannas projected to cope well with a changing climate and is considered the centerpiece of future southeastern US efforts for carbon sequestration.

Longleaf pines are well-suited to a number of different landscapes and soil types, and are more resistant to disease and insect damage than other pines. The ecosystem is fire dependent, triggered to germinate by the same fire that keeps competing hardwoods in check. Wiregrass is crucial to the success of the longleaf pine ecosystem because of its role as the dominant source of fuel for fires, as well as its resilience in the aftermath of these fires. While the longleaf pine's initial decline was brought on by overharvesting and development, the ecosystem faces the ongoing threat of fire suppression, which allows competition with hardwoods.