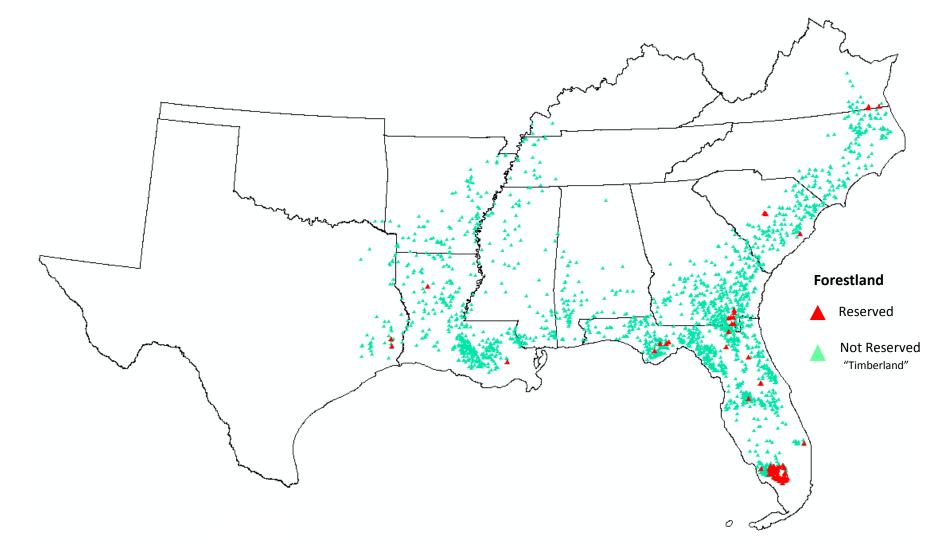


## Introduction

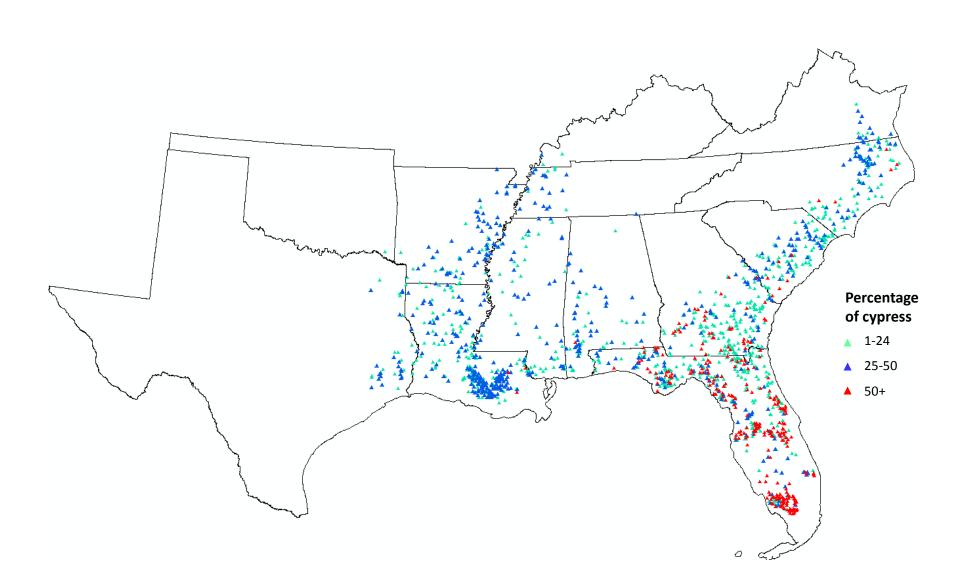
- The Cypress Situation in the Southern U.S., 2010
- M.J. Brown and S.G. Lambert

One decade into the new millennium, concerns over cypress sustainability emanating from a 1990's boom in cypress used for mulch have abated little. The iconic species typifies southern wetland forests in perceptions and reality. Cypress regeneration involves complicated hydrologic regimes sensitive to disturbances that alter or impede natural processes for reestablishment of forest area once impacted by human or natural factors. This paper analyzes the population, size, extent, and ownership of cypress in the southern United States of America (U.S.) for indicators regarding the sustainability of this unique resource. Research utilizes the latest Forest Inventory and Analysis (FIA) data available from the United States Department of Agriculture (USDA) Forest Service. In 2010, findings show Cypress forest types cover nearly 3.4 million acres, or 1.6 percent of the 210 million acres of timberland in the southern USA. One million of the cypress forest type acres occur in the State of Florida alone. There are a total of 1.125 billion cypress trees across the southern USA, which accounts for 0.8 percent of all tree species present. Sixty-one percent of these cypress trees are small (1.0-4.9 inches in diameter at breast height), 20 percent of the cypress trees are large (9.0+ inches in diameter at breast height), and 19 percent are medium (5.0-8.9 inches in diameter at breast height). The paper further explores differences in distribution of cypress across the southern USA and changes over time regarding key attributes of the resource to assess sustainability.



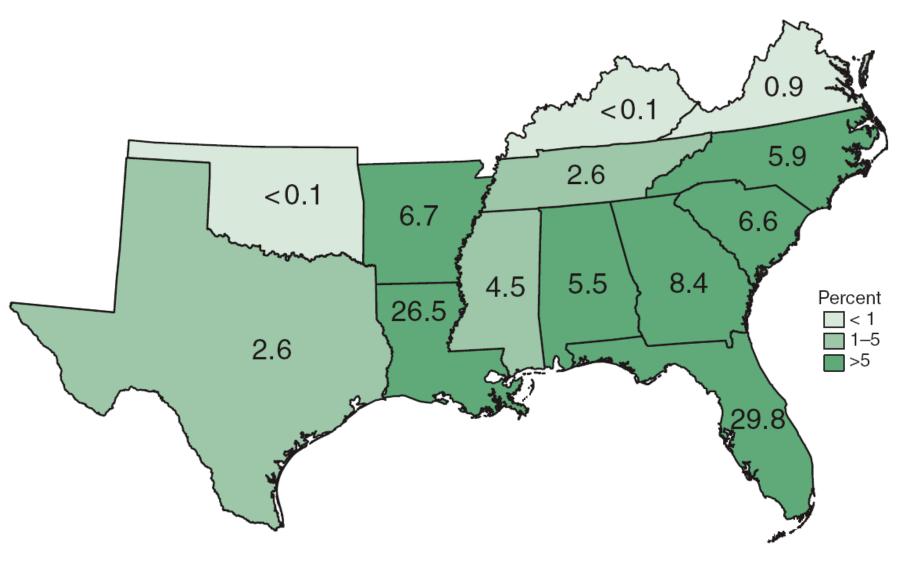
Occurrence of cypress trees on FIA plots in the Southern U.S., on forestland (reserved or not reserved), 2010.

- 3.9 million acres of forestland classified as cypress-tupelo forest type
- 0.5 million acres of the cypress-tupelo are classified as RESERVED
- 3.4 million acres of the cypress-tupelo are classified as TIMBERLAND



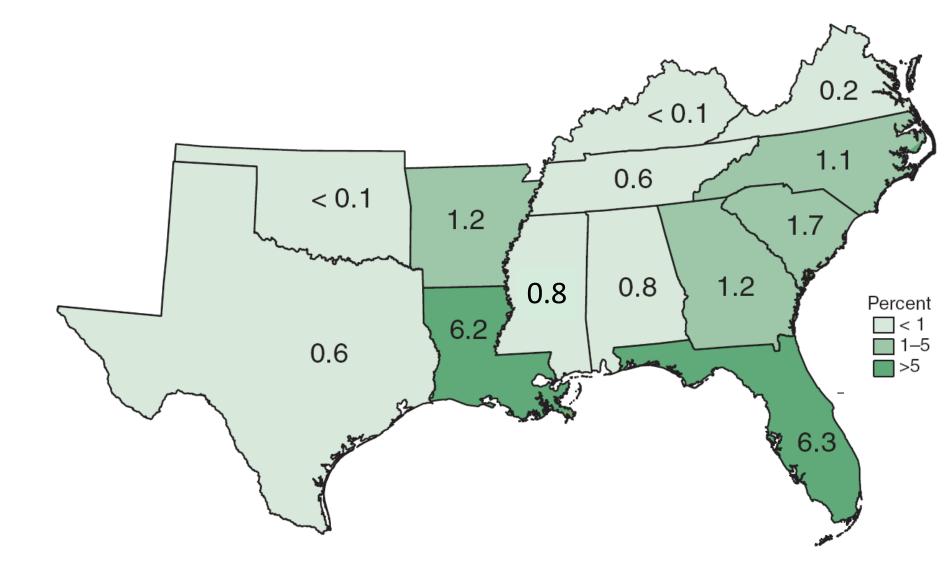
Occurrence of cypress trees on FIA plots in the Southern U.S., by percentage of cypress tree stocking, 2010.

- Cypress trees comprising the majority of stocking (> 50 %) occur more frequently in Florida Cypress trees comprising medium stocking (25-50 %) are most prevalent in Louisiana
- Cypress trees comprising minimal stocking (1-24 %) are widespread



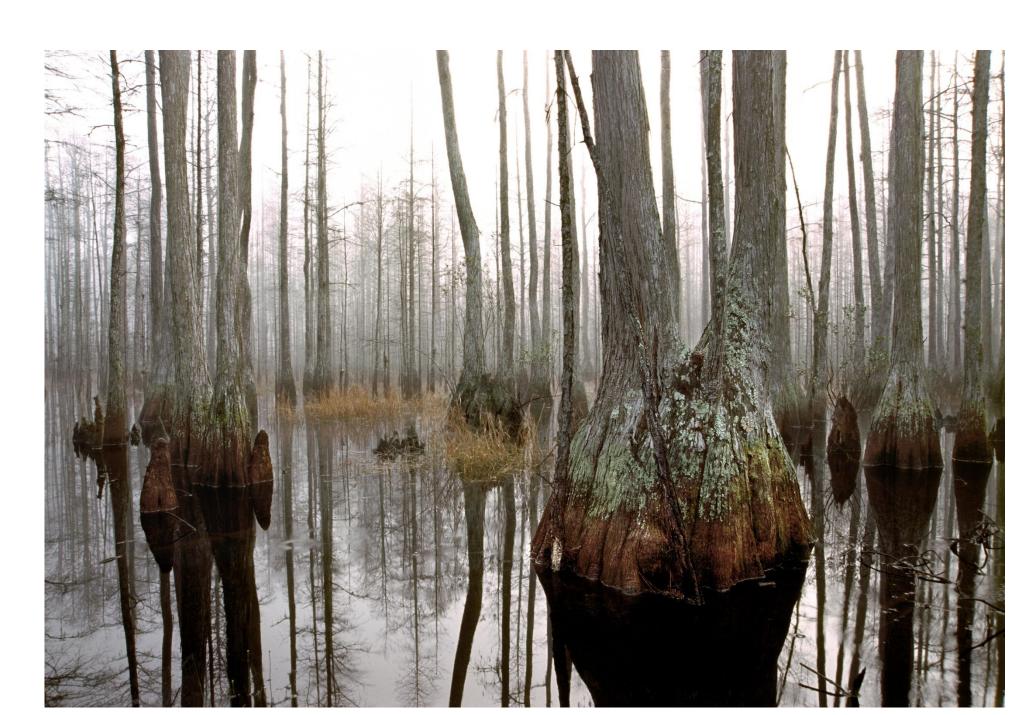
Percent distribution by State for 3.4 million acres of Southern U. S. timberland designated as cypress-tupelo forest type, 2010.

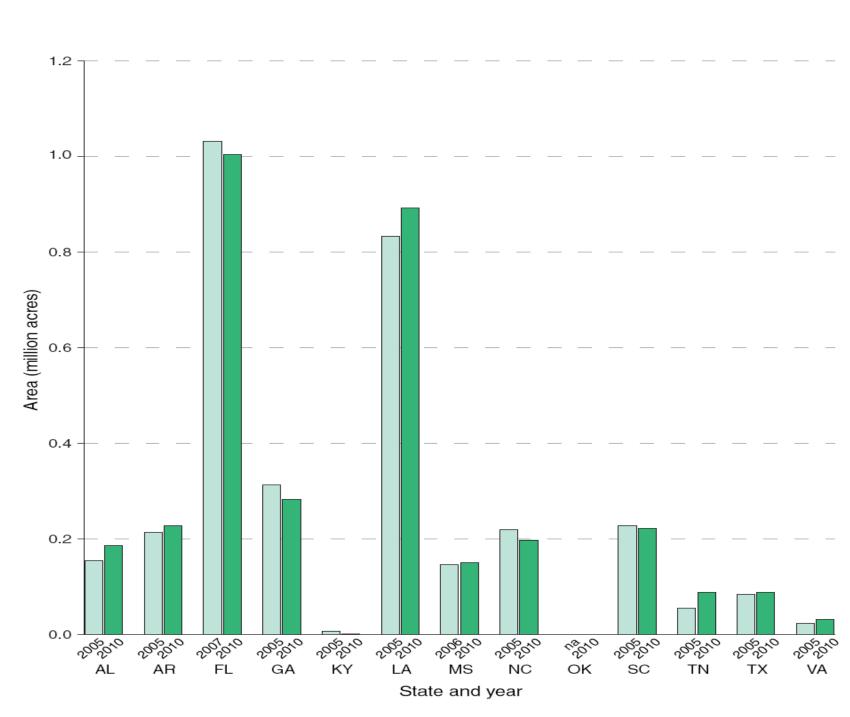
- More than half (56 percent) of the 3.4 million acres of cypress-tupelo is in two States FL & LA
- Nearly two-thirds (65 percent) of the South's cypress-tupelo is in three States FL, LA, & GA 94 percent of the cypress-tupelo is concentrated in eight of the 13 States



Percent that cypress-tupelo timberland comprises of total timberland within each State in the Southern U. S., 2010.

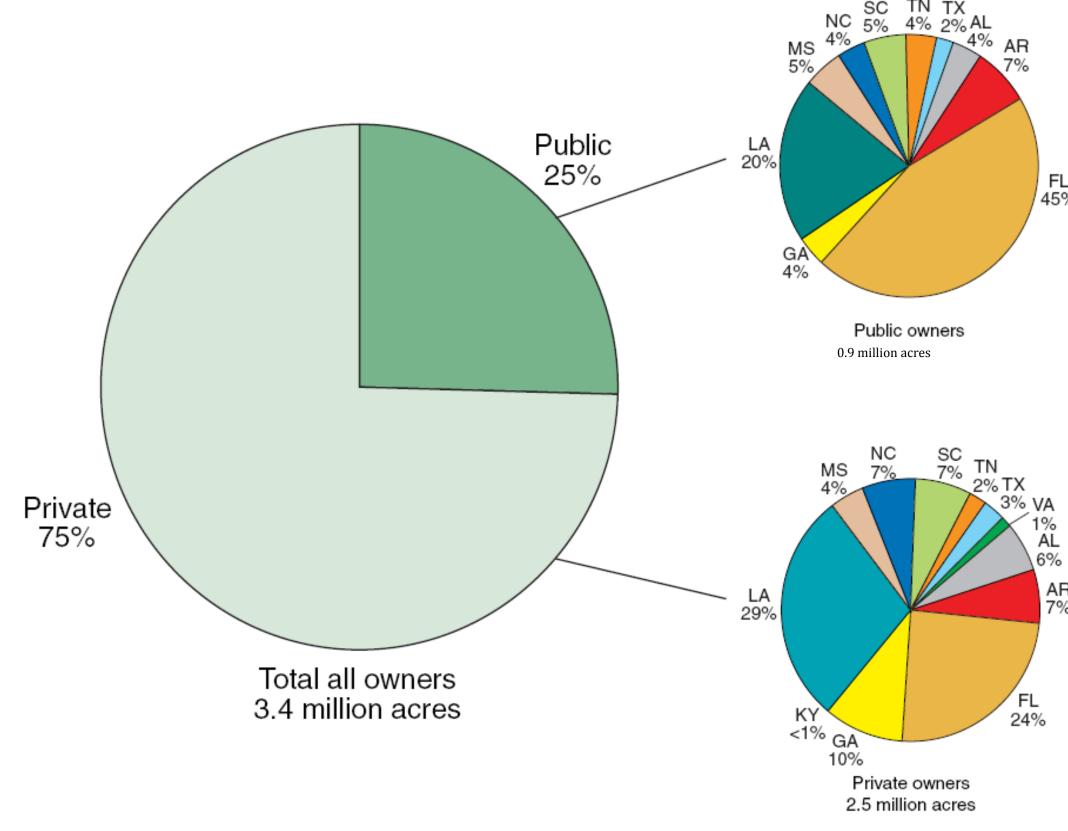
- Cypress-tupelo comprises < 2 percent of total timberland in 11 of the 13 States</li>
- In the two States with the most cypress-tupelo (FL & LA), it comprises < 7 percent</li> Cypress-tupelo is relatively uncommon Southwide and within the individual States





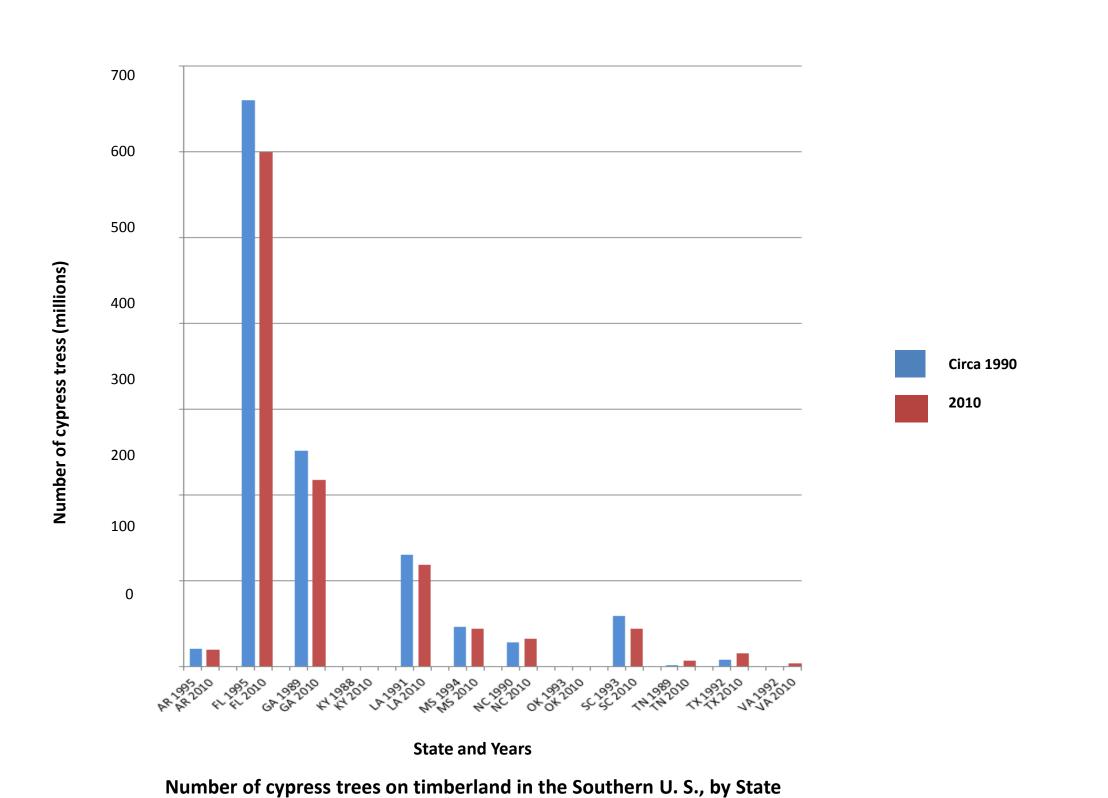
Trends in area of cypress-tupelo timberland by State (based on available comparable FIA data) and year in the Southern U.S..

- Area of cypress-tupelo has increased in 7 of the 13 States and decreased in 5
- Decreases occurred in 3 of the 4 States containing the most cypress-tupelo (FL, GA, & SC)
- Largest increases occurred in LA and AL



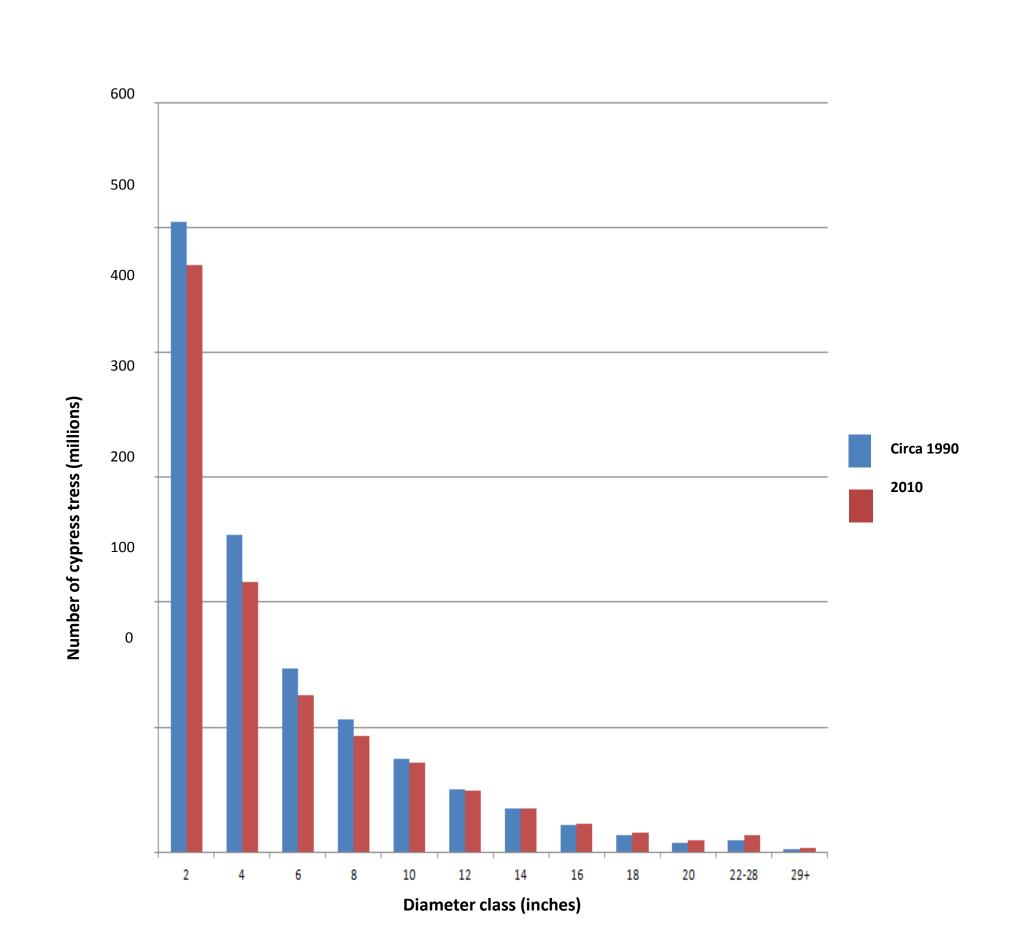
Percent distribution of cypress-tupelo timberland by general ownership classes in the Southern U.S., 2010.

- Three-fourths (75 %) of the cypress-tupelo acreage is privately owned
- One-half (53 %) of the privately owned cypress-tupelo occurs in FL and LA
- Nearly two-thirds (65 %) of the publicly owned cypress-tupelo is in FL and LA



and the years circa 1990 versus 2010.

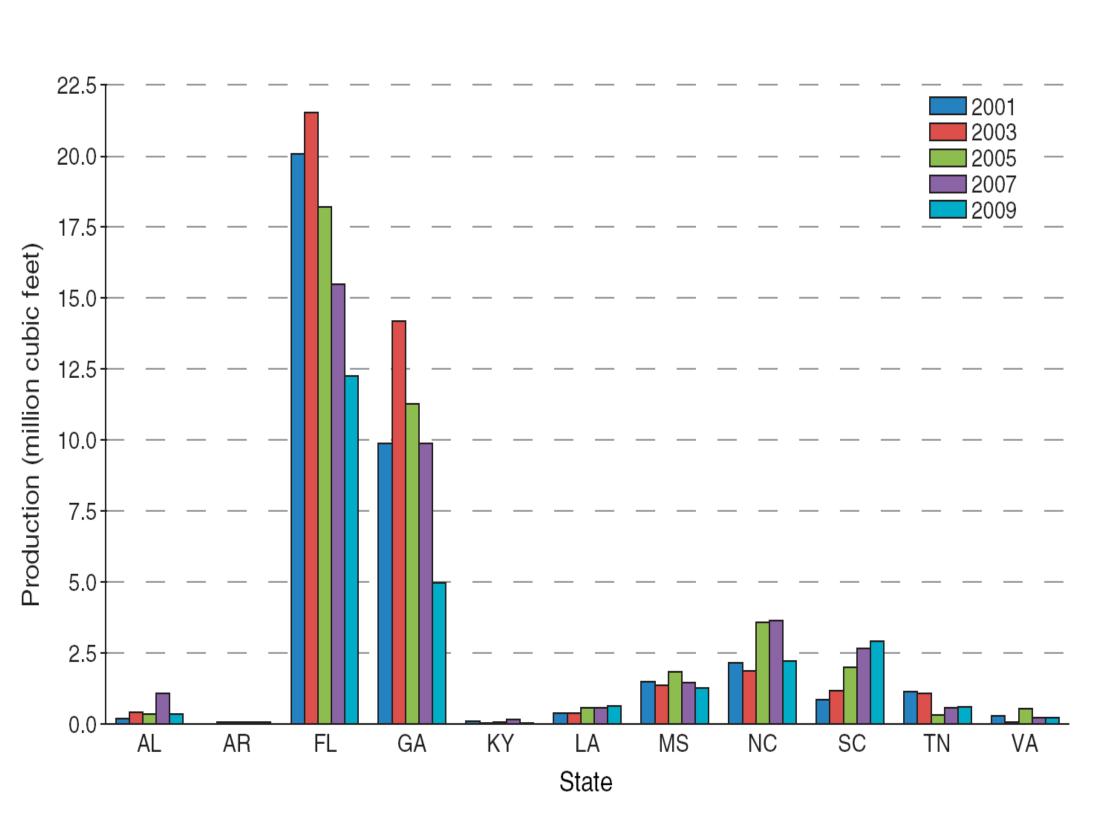
- 1.125 billion cypress trees across the southern U.S. More than half (53 %) are located in FL, 19 % are in GA and 11 % in LA
- Number of cypress trees has decreased in all 5 States with the highest numbers



Number of cypress trees on timberland in the Southern U. S. by 2" diameter class and the years circa 1990 versus 2010.

- 61 percent of the cypress trees are small (1.0-4.9 inches in diameter at breast height) • 19 percent of the cypress trees are medium (5.0-8.9 inches in diameter at breast height)
- 20 percent of the cypress trees are large (9.0 inches and larger at breast height) Numbers of cypress trees have decreased in all diameter classes below 14 inches





Cypress utilization by State and year in the Southern U.S., 2001-09.

- Cypress utilized for products in the early 2000s has largely come from two States, FL & GA
- Cypress utilization peaked around 2003 in the leading States of FL and GA
- Cypress utilization has decreased from its peak by 43 % in FL and by 65 % in GA



## Summary

At 3.4 million acres representing 1.6 percent of the 210 million acres of timberland in the Southern U.S., The cypress-tupelo forest type is relatively uncommon. By tree counts, where 1.125 billion individual cypress trees account for 0.8 percent of the 136 billion trees of all species present, it is even less common. Yet, this icon typifies southern wetland forests. Hence, the concern over the sustainability of the species.

The data shows that despite its presence in all 13 southern States, its occurrence is concentrated in the two States of Florida and Louisiana. Therefore, data surrounding the species is largely driven by factors occurring in these two States.

Southwide data suggests the cypress-tupelo type to be relatively stable. However, regional data can ameliorate more localized changes that are difficult to assess. Gains in some States or even sub-state areas can counter the decreases observed in others. It is also unknown whether the decreases in cypress utilization presented will offset nominal reductions in tree population numbers. In perspective, continued assessment of this resource is necessary to provide even more reliable trend information.