

# New Forest Inventory Statistics for SE Georgia

Julian R. Beckwith, III<sup>1</sup>, Coleman W. Dangerfield<sup>2</sup>,  
David J. Moorhead<sup>3</sup>, and William G. Hubbard<sup>4</sup>

<sup>1</sup>Associate Professor (Wood Products)

<sup>2</sup>Associate Professor (For. Econ.)

<sup>3</sup>Associate Professor (For. Regeneration)

<sup>4</sup>Regional Extension Forester



The Entomology and Forest Resources  
Digital Information Work Group

## Introduction

The US Forest Service, in cooperation with the Georgia Forestry Commission, periodically surveys and catalogs standing timber in Georgia. The previous such inventory was completed in 1988, and during the past two years, a new survey has been under way. A report for the Southeast-Georgia Forest Service Inventory Unit was released November 1997.

Because most of the state's pulp/paper mills and many large pine sawmills are located in Southeast Georgia, there has been concern that demand would deplete timber supplies in the region. Both the forest-products industry and the natural environment would suffer from such shortages. Results of the survey have been eagerly awaited.

## Southeast Georgia

According to the Georgia Forestry Commission 1996 catalog of Wood Using Industries in the state, there are six pulp/paper mills, eight large pine sawmills and one large hardwood sawmill located in the SE U.S. Forest Service Inventory Unit of Georgia.

## Terminology

The U.S. Forest Service forest inventory data are reported using very specific terminologies. Relevant definitions used in the summary below are:

**timberland** - forest land capable of producing 20 cu.ft. of industrial wood per acre per year, and not withdrawn from timber production.

**sawtimber volume** - volume of timber (expressed in International 1/4-inch log rule) meeting minimum standards of diameter, length and defect in softwood trees 9.0" DBH (diameter breast height) and larger in logs at least 8' long with a minimum diameter of 6" inside bark, and in hardwood trees 11.0" DBH and larger with minimum log diameters inside bark of 8".

**growing stock volume** - the volume of sound wood (expressed in cubic feet) from a 1' stump to a 4" diameter-outside-bark top, in living trees 5" DBH and up, of commercial species with potential to produce at least 1, 12' or 2, 8' saw logs. (This category includes saw timber volume too.)

1997. New Forest Inventory Statistics for SE Georgia. Georgia Cooperative Extension Service, College of Agricultural and Environmental Sciences, The University of Georgia, Athens, GA 30602 U. S. A.

1998. The Entomology and Forest Resources Digital Information Work Group, College of Agricultural and Environmental Sciences and Warnell School of Forest Resources, The University of Georgia, Tifton, Georgia 31793 U. S. A. BUGWOOD 98-023

<http://www.bugwood.caes.uga.edu/>

## Major points

The new inventory indicates that since 1988 *on timberland* in the entire Inventory Unit:

- softwood sawtimber has been growing at an average rate equal to its average harvest, and growth of softwood growing stock has exceeded average harvest by about 7%
- average growth of hardwood sawtimber has exceeded average removals by about 12%, although average harvest of hardwood growing stock has exceeded average growth by about 4%

It is a relief to find even where timber demand has been high, growth of softwood sawtimber and growing stock has kept up with its utilization. It is also good to find that hardwood sawtimber growth has been exceeding its harvest, although disappointing that hardwood growing stock has been removed faster than its regrowth. Such information helps management decision making.

Some other interesting statistics revealed by the recent inventory include:

- total area of timberland in the Inventory Unit has increased slightly since the last survey, now covering about 68% of all land

- the area of timberland owned by forest industry has decreased, now comprising about 34% of the land area, and that owned by private corporations and individuals has increased, now covering approximately 60% of the area

- acreage of pure pine and pure hardwood timberland has decreased slightly since the last survey, to 55% and 32% of all timber land respectively, but oakpine timberland acreage has increased somewhat, to 11% of the area

- 70% of pure pine timberlands are in plantations

- longleaf/slash-pine timber acreage still predominates, although it is down slightly, now comprising about 33% of total timberland area

- the volume of pine sawtimber is up 4% from 1988, with hard-hardwood sawtimber volume up 15%

- “other” softwood and soft-hardwood sawtimber volumes are down 16% and 11% respectively

- the volume of pine and hard-hardwood growing stock has increased by 3% and 10% respectively since 1988, while the growing-stock volume of “other” softwoods and soft hardwoods has decreased 12% and 8% respectively

- net annual softwood sawtimber growth is 7% higher since 1988, and net annual hardwood growth decreased less than 1%

- average growth of softwood growing stock has been about 91 cu.ft./Ac./yr., up from 81 cu.ft./Ac./yr. in the previous survey

- the new data show softwood sawtimber growth averaged about 1,100 bd.ft./Ac./yr., compared to about 1,040 bd.ft./Ac./yr. before

- of the approximately 550 thousand acres of timberland harvested, thinned, improved or site prepared on average each year during the period, approximately 322 thousand acres belong to non-industrial private landowners (nearly 60%)

- average annual final-harvest acreage for the Unit since 1988 has been almost 170,000, with an average of nearly 181,000 acres purposely regenerated annually, 67% of which were pine plantations

Survey sampling sites are distributed thoroughly enough over the entire Unit that collected data adequately represent the whole area. However, each individual county has relatively few survey sample sites, reducing chances that statistics will accurately reflect single county conditions. Nevertheless, individual county comparisons are inevitable, and they provide such information as:

- Echols County has the highest proportion (94%) of timberland in the Unit, and Chatham the lowest (31%)

- Clinch County has the largest acreage (469,000) of timberland and Evans the smallest (72,000)

- forest industry owns more acreage of timberland in Clinch County (280,000) than in any other, and least in Evans County (4,400)

- the largest acreage of timberland owned in the Unit by non-industrial landowners is in Emmanuel County (258,000), and the smallest is in Glynn County (50,000)

- Coffee County has the highest proportion of timberland owned by non-industrial forest landowners (94%), and Echols County the lowest (22%)

- Liberty County has the largest volume of standing sawtimber (1,627,000 MBF) and Candler County the smallest volume (237,000 MBF) in the Unit

- Clinch County has the largest volume of growing stock (497 million cu.ft.) and Candler County the smallest (86 million cu.ft)

- Clinch County has the highest pine sawtimber growth to harvest ratio (1.73) of any other county in the District and Toombs County the lowest of those counties harvesting significant amounts of timber

- Candler County has the highest growth to harvest ratio (1.94) for pine growing stock and Charlton and Dodge Counties the lowest (.67)

- for hardwood sawtimber, Toombs County has the highest growth to harvest ratio (12.12) and Bacon County the lowest (0.0)

- for hardwood and growing stock, Toombs County has the highest growth to harvest ratio (8.33) and Jenkins County the lowest (.31)

### Summary

Efforts of the U.S. Forest Service and Georgia Forestry Commission to provide timber-resource statistics for Southeast Georgia have provided welcome information overall. For the Inventory Unit, the area of timberland is still a significant proportion of total land area and has increased slightly since 1988; timber categories are not being overcut except for hardwood growing stock; pine plantations make up a considerable proportion of timberland; and more land is being purposely regenerated than is being cut in final harvests. Also, softwood growing stock and sawtimber are growing faster than before. Such statistics are encouraging but should not foster complacency.

### References

**Thompson, M. T., and R. M. Sheffield.** 1997. "Forest Statistics for Southeast Georgia, 1996". U.S. For. Ser. Resource Bulletin SRS-23. 59 pp.

**Johnson, T. G.** "Forest Statistics for Southeast Georgia, 1988". U.S. For. Ser. Resource Bulletin SE-104. 53pp.