

2018 - 2019

**FOREST TREE NURSERY
SEEDLING PRODUCTION SURVEY**

Scott Enebak
November 2019

2018 - 2019 Survey

- ✓ Two page questionnaire sent in June to all available nursery addresses in 12 southern states.
- ✓ Follow up telephone calls made to maximize participation and update addresses.
- ✓ Creation of an Excel data file, then data summary using SAS.
- ✓ Report preparation.

RESULTS

Questionnaire Response

- Total of 58 surveys sent out via Qualtrics Online Form
- 49 were filled out with seedling production numbers.
- 9 nurseries did not respond to online request.
- 4 of those 9 nurseries had responded to our requests in previous years.
- Used previous years' numbers.
- 53 surveys in data, same data points as last year.

Conifer Production by Stock: 2018-19

| | Conifer Production | Percent Change from Last Year |
|-----------------|-----------------------|----------------------------------|
| Bareroot Stock | 775,085,000 | - 6.0% |
| Container Stock | 226,491,000 | +5.0% |
| Total Conifer | 1,001,576,000 | -3.7% |

Conifer Production: 2018-2019

| Species | Production | Percent Change from Last Year |
|---------------|-------------|-------------------------------|
| Loblolly Pine | 801,338,000 | - 2.8 % |
| Slash Pine | 104,194,000 | - 14.0 % |
| Longleaf Pine | 92,017,000 | +2.7 % |

- 85% of Loblolly pine produced is bareroot stock
- 82% of Slash pine produced is bareroot stock
- 85% of Longleaf pine produced is container stock

Conifer Production: 2018-2019

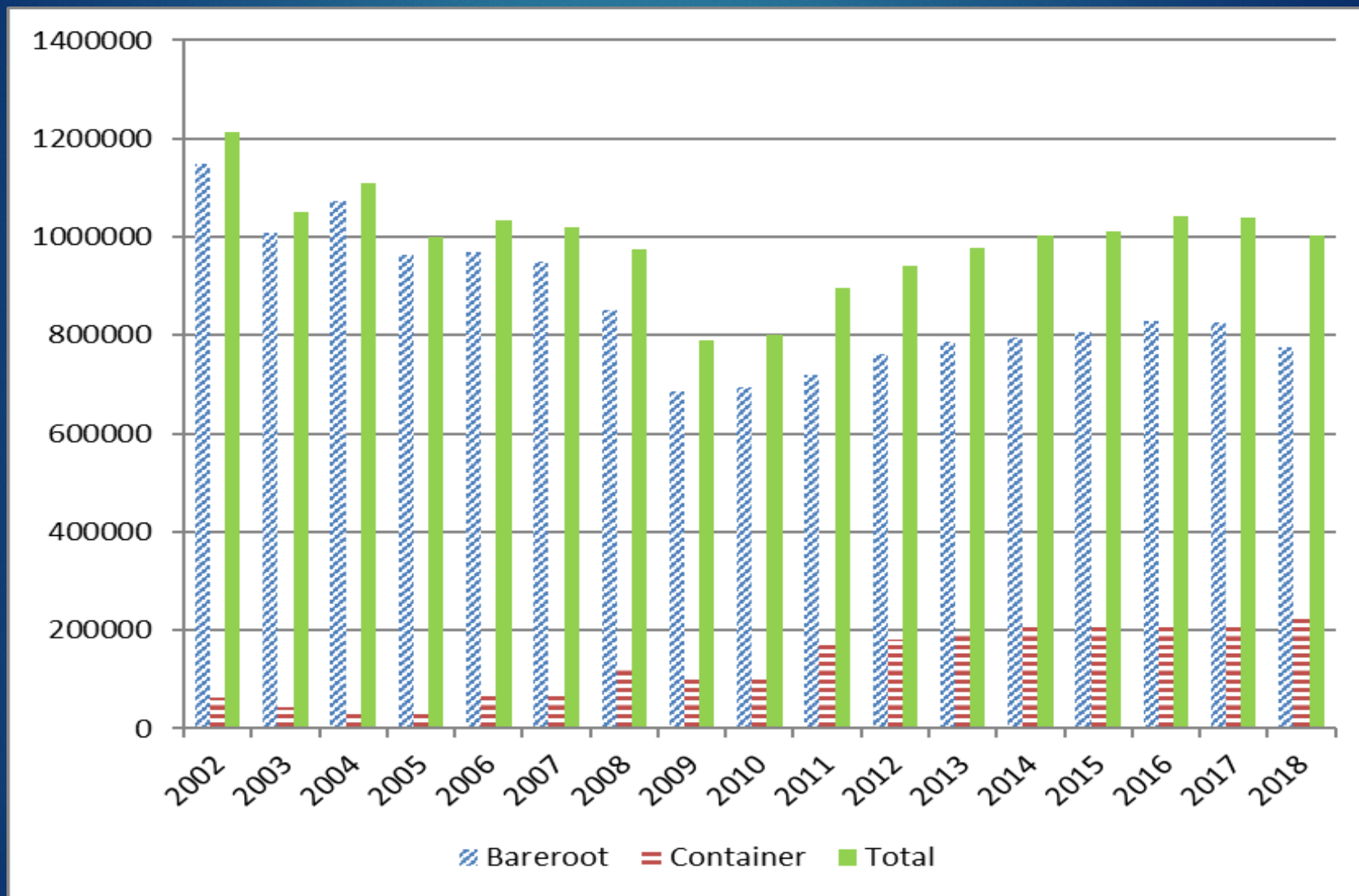
| | 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|----------|---------|---------|---------|---------|---------|---------|
| Loblolly | 80% | 79% | 78% | 77% | 78% | 77% |
| Slash | 09% | 10% | 11% | 10% | 10% | 10% |
| Longleaf | 09% | 09% | 09% | 11% | 11% | 11% |
| Total | 98% | 98% | 98% | 98% | 99% | 98% |

Production by Ownership Category: CONIFERS

| | 2018-2019 | | 2017-2018 | |
|------------------|-------------|---------|-------------|---------|
| | Production | Percent | Production | Percent |
| Bareroot | | | | |
| State | 77,094,000 | 10 | 86,622,000 | 10 |
| Private | 509,567,000 | 64 | 522,628,000 | 62 |
| Industry | 211,101,000 | 26 | 237,464,000 | 28 |
| | | | | |
| Container | | | | |
| State | 7,085,000 | 3 | 7,746,000 | 4 |
| Private | 202,521,000 | 89 | 191,036,000 | 89 |
| Industry | 17,221,000 | 08 | 17,022,000 | 08 |

Table 7

CONIFER Production by Stock Type: 2002-2018



Hardwood Production

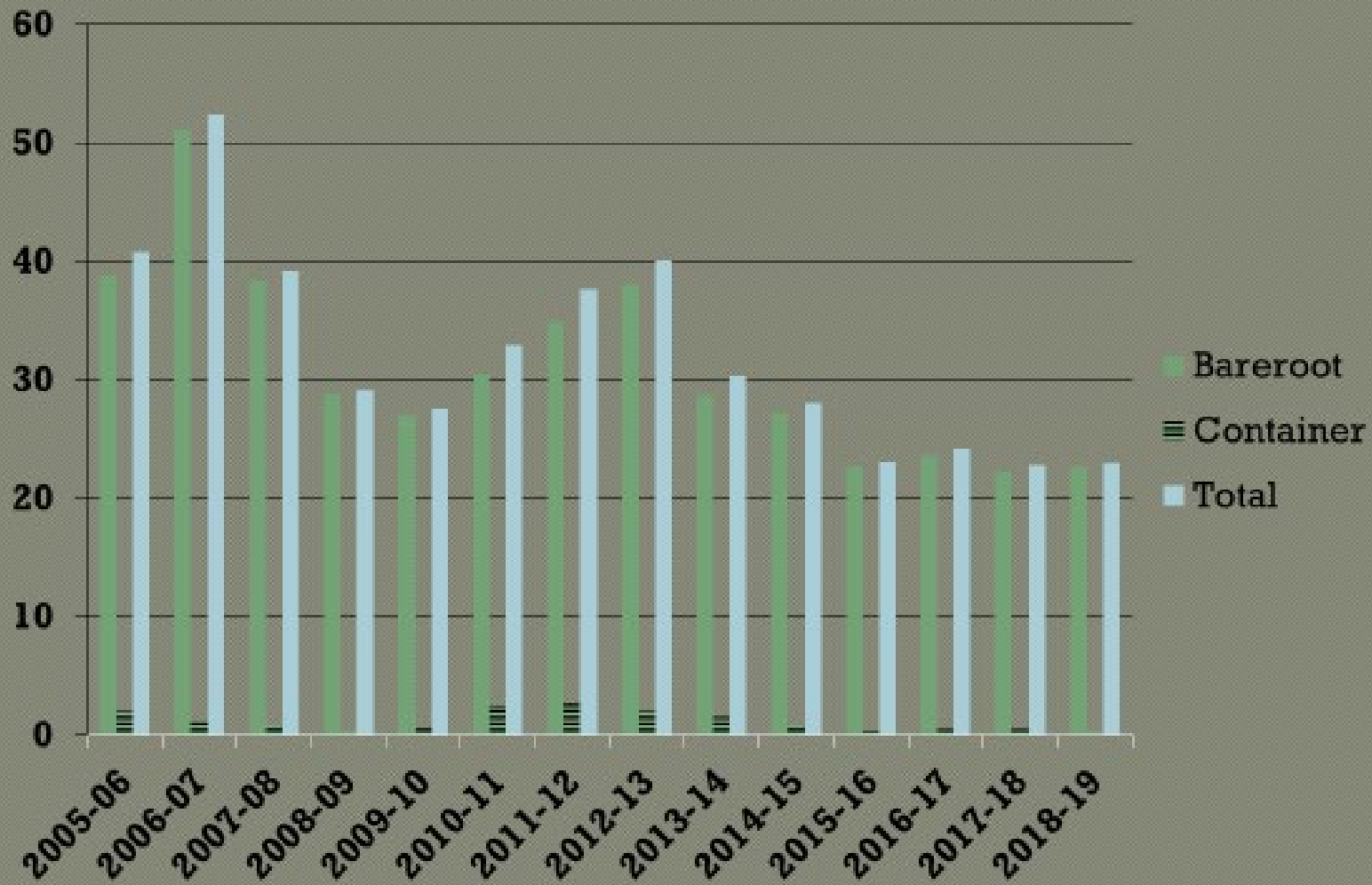
| | 2018-2019 | | 2017-2018 | | 2016-2017 | |
|-----------------|------------|----------------|------------|----------------|------------|----------------|
| | Numbers | Percent Change | Numbers | Percent Change | Numbers | Percent Change |
| Bareroot Stock | 22,679,000 | +1.0% | 22,467,000 | -5.0% | 23,596,000 | +3.8% |
| Container Stock | 335,000 | +3.7% | 323,000 | -40% | 535,000 | +64% |
| Total Hardwood | 23,014,000 | +1.0% | 22,790,000 | -6.0% | 24,131,000 | +9.1 |

RESULTS - Hardwood production

| | 2018-19 | % Change Previous yr | 2017-18 | % Change Previous yr |
|---------------|-------------------|-------------------------|-------------------|-------------------------|
| Dogwood | 269,000 | -34% | 407,000 | +16% |
| Eucalyptus | | | | |
| Green Ash | 318,000 | -42% | 552,000 | +4% |
| Oak | 14,821,000 | +6% | 13,951,000 | -7% |
| Others | 5,117,000 | +9% | 4,686,000 | -14% |
| Pecan | 606,000 | -60% | 381,000 | -28% |
| Sweetgum | 758,000 | -36% | 1,183,000 | +26% |
| Sycamore | 413,000 | -52% | 868,000 | +57% |
| Walnut | 103,000 | -9% | 114,000 | +44% |
| Yellow Poplar | 609,000 | -6% | 648,000 | +33% |
| Total | 23,014,000 | +1% | 22,790,000 | -6% |

Table 6

Hardwood Production: 2005-2018



Production by Ownership Category: Hardwoods

| | 2018-2019 | | 2017-2018 | | 2016-2017 | |
|------------------|------------|---------|------------|---------|------------|---------|
| | Production | Percent | Production | Percent | Production | Percent |
| Bareroot | | | | | | |
| State | 10,357,000 | 46 | 8,302,000 | 37 | 9,078,000 | 38 |
| Private | 12,321,000 | 54 | 14,132,000 | 62 | 11,770,000 | 50 |
| Industry | 0 | 0 | 34,000 | 1 | 2,745,000 | 12 |
| | | | | | | |
| Container | | | | | | |
| State | 3,000 | 1 | 2,000 | 1 | 4,000 | 3 |
| Private | 332,000 | 99 | 321,000 | 99 | 531,000 | 97 |
| Industry | 0 | 0 | 0 | 0 | 0 | 0 |

Table 7

Production by Ownership Category: ALL SPECIES

| | 2018-2019 | | | 17-18 (MM) | 16-17 (MM) | 15-16 (MM) | 14-15 (MM) |
|----------|---------------|-----|--|---------------|---------------|---------------|---------------|
| State | 84,178,000 | 8% | | 9% | 9% | 8% | 10% |
| Private | 712,083,000 | 69% | | 67% | 53% | 59% | 56% |
| Industry | 228,322,000 | 22% | | 24% | 38% | 33% | 34% |
| Total | 1,024,583,000 | | | 1,062.5 | 1,069.9 | 1,034.5 | 1,031.3 |

Table 10

Production by State - All species

| | 2018-2019 Production (x 1000) | Rank | % Change Previous Year | 2017-2018 Production (x 1000) | Rank | % Change Previous Year |
|-------------|-------------------------------------|------|------------------------------|-------------------------------------|------|------------------------------|
| Alabama | 86,246 | 5 | -8 | 93,323 | 4 | -12 |
| Arkansas | 111,917 | 3 | 7 | 104,535 | 3 | 6 |
| Florida | 46,501 | 8 | -22 | 59,601 | 8 | 1 |
| Georgia | 328,599 | 1 | -1 | 331,099 | 1 | -6 |
| Louisiana | 50,559 | 7 | 8 | 46,599 | 9 | 38 |
| Mississippi | 85,804 | 6 | -4 | 89,019 | 5 | 3 |
| N. Carolina | 26,230 | 10 | -62 | 68,258 | 7 | -8 |
| Oklahoma | 2,754 | 12 | -28 | 3,847 | 12 | -21 |
| S. Carolina | 161,454 | 2 | 14 | 142,146 | 2 | 9 |
| Tennessee | 6,054 | 11 | 11 | 5,451 | 11 | -7 |
| Texas | 89,328 | 4 | 2 | 87,498 | 6 | 12 |
| Virginia | 29,137 | 9 | -6 | 31,140 | 10 | -12 |

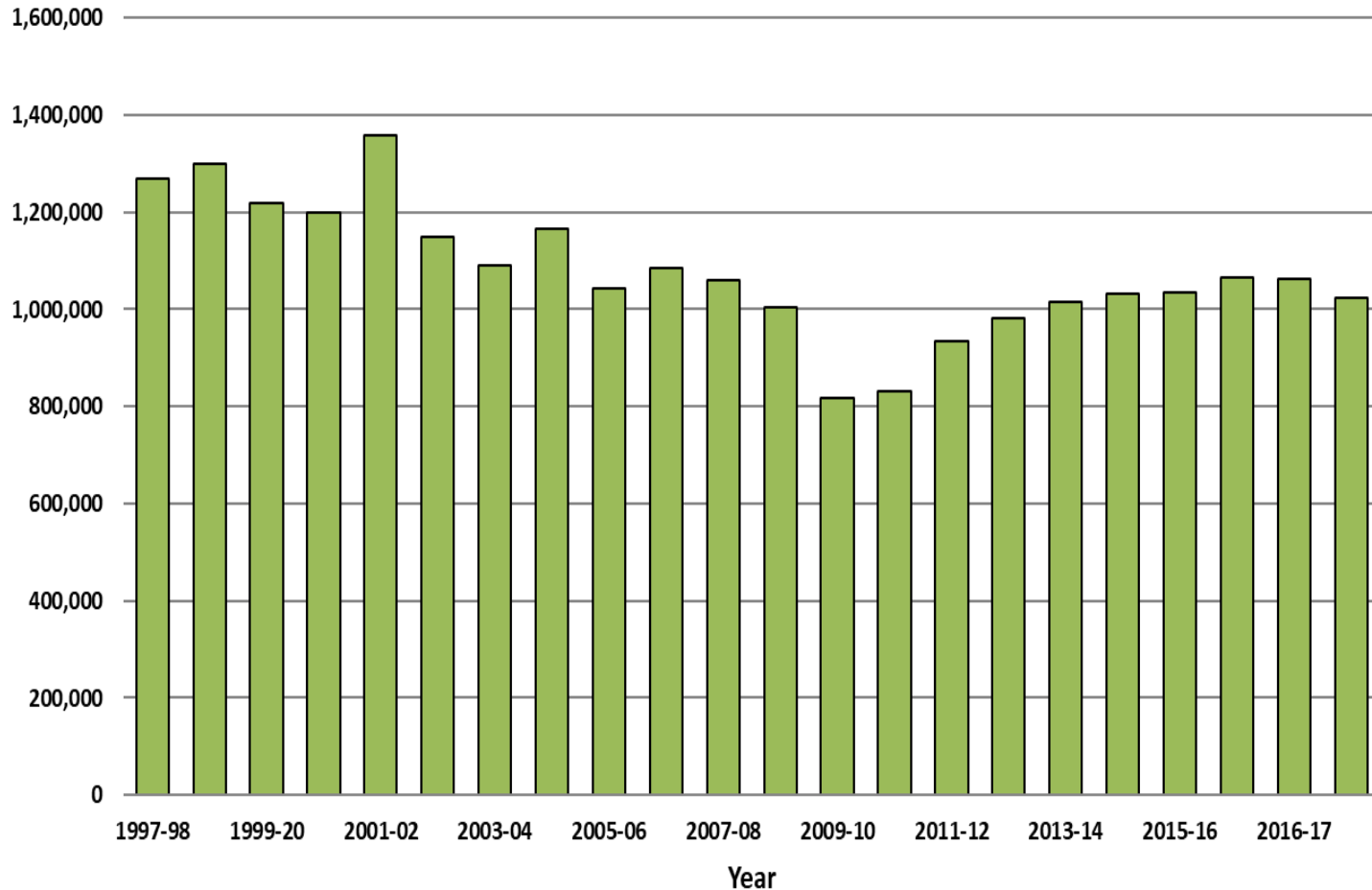
AU Southern Forest Nursery Management Cooperative Members

- All species & stock types

- ☐ Nursery Cooperative Members comprise 87% of all regional seedling production.
- ☐ Nursery Cooperative Members comprised 91% of bareroot seedlings and 72% of container seedlings.

Seedling Production: 1997-2018

Seedling Production x 1000



2018-19 Seedling Production Survey

1. Regional seedling production was down 39 million seedlings from last year, but still above the magical 1 BILLION mark with 1,024,560,000 seedlings.
2. Seedling production in 2018-2019 was down 3.6% overall across the region from the 2017-2018 planting season.
3. Regional bareroot conifer production is down 6% and hardwood production increase slightly; 567 M from the previous planting season.
4. Georgia is the No. 1 seedling producer for conifer (324.0 MM) and Arkansas is the No. 1 hardwood (8.5 MM) seedling producer.
5. Nursery Cooperative members continue to lead seedling production in the region and have increased it's contribution to container stock production.

