



## Southern Pine Beetle South-wide Trend Predictions for 2013

(SPB Activity Expected To Increase In Several Southern States)

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contributed by southern forest  
pest specialists)

In the South, southern pine beetle (SPB) activity last year increased above levels experienced in 2011. A total of 1,162 infestations were reported in 13 southern states, compared to only 63 SPB infestations in 2011 and 71 infestations in 2010. Almost all (1,068 or 92%) of the 2012 infestations occurred in Mississippi, primarily on the Homochitto National Forest. Based on pheromone traps deployed during the spring of 2013, levels of SPB are expected to continue increasing, primarily on National Forests and adjacent private forest lands in Mississippi, and certain counties in Alabama, South Carolina, and Virginia.

The southern pine beetle, *Dendroctonus frontalis*, has earned a reputation as the most destructive forest pest of pine forests in the South. In 2000, nearly 60,000 multiple-tree infestations were detected on federal, state and private forest lands in the South, resulting in the loss of millions of dollars of resources. By

2008, the number of SPB infestations had declined to 1,433 spots detected in 16 states, with most spots occurring in Alabama, North Carolina and South Carolina. SPB activity continued to decline in 2009, 2010 and 2011 to levels seldom enjoyed throughout the South. Only New Jersey and Mississippi experienced an outbreak in 2012 while 57 spots were reported in Alabama and 23 spots in Virginia, 11 in Florida and 3 in South Carolina. No SPB activity was reported in the other southern states.

A reliable system for predicting SPB infestation trends (increasing, static, declining) and levels (low, moderate, high, outbreak) using pheromone traps has been implemented across the South since 1988. This information provides forest managers with valuable insight for better anticipating SPB outbreaks and more lead time for scheduling detection flights and preparing suppression programs.

Each spring, traps baited with the SPB attractant (frontalin) and host compounds (alpha-pinene and beta-pinene) are set out in pine forests when dogwoods begin to bloom.

Dogwood blooms mark the primary dispersal season for populations of the destructive SPB as well as certain beneficial insects. Federal and state cooperators monitor the traps weekly for a 4-6 week period. Of particular value for forecasting purposes are catches of clerids (also called checkered beetles), known predators of SPB. Using data on the average number of SPB captured per trap per day and the relative proportion of SPB to checkered beetles, infestation trends for the current year can be forecasted.

The results from the 2013 prediction survey ([Table 1](#)), based on 209 trapping locations within 14 states, indicate continued low SPB activity in most southern states, with the exception of Mississippi, Alabama, and a few counties in Georgia, South Carolina and Virginia, where some SPB activity may occur. Of those locations surveyed in the southern U.S., only Chesterfield and Cumberland counties in Virginia, McCormick County in South Carolina, Franklin and Jackson counties and Fort Stewart Army Base in Georgia are expected to see increasing SPB activity in 2012. In Alabama, the Bankhead,

Oakmulgee and Shoal Creek Ranger Districts may see infestations of SPB, based on elevated tap catches this spring. In Mississippi, high trap catches were present not only on the Homochitto National Forest and surrounding private forest lands, but also on the Tombigbee and Bienville National Forests and in Scott and Smith counties.

For the first time in several years, a few SPB adults were captured in traps west of the Mississippi River; in Desha County, Arkansas (not included in Table 1), East and West Feliciana parishes in Louisiana, and on the Hochatown Ranger District in Oklahoma. A few SPB adults also were found in traps set out on the Nolichuky/Unaka Ranger District in Tennessee, compared to none in 2012. No SPB were caught in Texas or Kentucky, but clerid beetles were abundant in most traps. Although trapping data from New Jersey and Maryland is not yet available, the outbreak is expected to continue in southern New Jersey (Atlantic, Cumberland, Salem counties, and Wharton State Forest) where many of the SPB infestations were treated in 2012. Very few or no SPB infestations are expected again this year in the other southern states. A state-by-state summary of trap catches for SPB and clerids for 2012 and 2013, together with SPB predictions for 2013, are listed in [Table 2](#).

Annual predictions of infestation trends have proven to be 75-85% accurate. Collectively, trend predictions from numerous specific locations provide insight into SPB population shifts within a given state as well as across the South. Also, comparison of trapping results for the current year with those from the previous year for the same localities provides additional insight into SPB population changes.

In general, average trap catches that exceed 20 SPB per trap per day, especially those in which SPB make up more than 35% of the total catch (of SPB and clerids), are indicative of increasing or continued high SPB infestation levels in the current year in southern states. Conversely, when catches of predators far outnumber those of SPB and fewer than 10 SPB adults are caught per day, infestation trends are likely to decline or remain at low levels. For reasons that remain unclear, these thresholds appear to be different at the northern extreme of the SPB range. In NJ, MD, and DE, experience has shown that trap catches of greater than ca. 6 SPB/trap/day are indicative of increasing or high SPB populations, while less than 1 SPB/trap/day is typical for declining or low infestation levels. It is uncertain whether the predator population is directly responsible for declines in SPB outbreaks. Most likely, predators are just one of many contributing factors.

Landowners with pine stands throughout the southern states are encouraged to take advantage of these low SPB population levels to thin over-dense pine stands as a preventive measure before the next SPB outbreak occurs. Federal cost shares for precommercial thinning of natural or planted pine stands and first thinning of pulpwood stands are available in many states as part of the SPB Prevention and Restoration Program. Contact your state forest pest specialist for details. On the other hand, in Mississippi, New Jersey and other states where SPB outbreaks may occur, early detection, ground evaluation and immediate control of active beetle infestations is warranted to reduce economic losses.

Appreciation is expressed to the many state and federal cooperators who provide the data for this annual survey. If you have questions, contact Dr. Ronald Billings, Texas A&M Forest Service, at (979) 458-6650 or by e-mail at [rbillings@tfs.tamu.edu](mailto:rbillings@tfs.tamu.edu).

Table 1: Southern Pine Beetle Predictions for 2013

Compiled by Ron Billings, Texas A&amp;M Forest Service, based on data received from South-wide cooperators as of June 6, 2013

| State                   | Location                | 2012       |           |               |                   |            | 2013       |            |               |                   |            | 2013 Predictions |
|-------------------------|-------------------------|------------|-----------|---------------|-------------------|------------|------------|------------|---------------|-------------------|------------|------------------|
|                         |                         | # of traps | % SPB     | SPB/ trap/day | Clerids/ trap/day | 2011 spots | # of traps | % SPB      | SPB/ trap/day | Clerids/ trap/day | 2012 spots |                  |
| OK                      | Hochatown (Tiak) R.D.   | 3          | 0%        | 0             | 9.6               | 0          | 3          | 1%         | 0.0           | 4.4               | 0          | S/L              |
|                         | Battist Co.             | 3          | 0%        | 0             | 5.8               | 0          | 3          | 0%         | 0.0           | 18.1              | 0          | S/L              |
|                         | McCurtain Co.           | 3          | 0%        | 0             | 11.6              | 0          | 3          | 0%         | 0.0           | 6.3               | 0          | S/L              |
|                         | <b>OK STATE AVERAGE</b> | <b>6</b>   | <b>0%</b> | <b>0</b>      | <b>9.0</b>        | <b>0</b>   | <b>3</b>   | <b>0%</b>  | <b>0.0</b>    | <b>9.6</b>        | <b>0</b>   | <b>S/L</b>       |
| AR                      | Caddo R. D.             | 3          | 0%        | 0             | 5.8               | 0          | 3          | 0%         | 0.0           | 24.8              | 0          | S/L              |
|                         | Mena R. D.              | 3          | 0%        | 0             | 2.2               | 0          | 3          | 0%         | 0.0           | 7.6               | 0          | S/L              |
|                         | Oden R. D.              | 3          | 0%        | 0             | 6.8               | 0          | 3          | 0%         | 0.0           | 3.2               | 0          | S/L              |
|                         | Womble R.D.             | 3          | 0%        | 0             | 7                 | 0          | 3          | 0%         | 0.0           | 22.2              | 0          | S/L              |
|                         | Clark Co.               | 3          | 0%        | 0             | 12                | 0          | 3          | 0%         | 0.0           | 31.4              | 0          | S/L              |
|                         | Columbia Co.            | 3          | 0%        | 0             | 10.2              | 0          | 3          | 0%         | 0.0           | 13.5              | 0          | S/L              |
|                         | Nevada Co.              | 3          | 0%        | 0             | 6.8               | 0          | 3          | 0%         | 0.0           | 12.3              | 0          | S/L              |
|                         | <b>AR STATE AVERAGE</b> | <b>21</b>  | <b>0%</b> | <b>0</b>      | <b>5.1</b>        | <b>0</b>   | <b>3</b>   | <b>0%</b>  | <b>0.0</b>    | <b>16.4</b>       | <b>0</b>   | <b>S/L</b>       |
| TX                      | Angelina N.F.           | 3          | 0%        | 0             | 13.5              | 0          | 3          | 0%         | 0.0           | 11.2              | 0          | S/L              |
|                         | Davy Crockett N. F.     | 6          | 0%        | 0             | 30.7              | 0          | 6          | 0%         | 0.0           | 21.8              | 0          | S/L              |
|                         | Sabine N.F.             | 6          | 0%        | 0             | 10.4              | 0          | 6          | 0%         | 0.0           | 17.5              | 0          | S/L              |
|                         | Sam Houston N.F.        | 3          | 0%        | 0             | 30.3              | 0          | 6          | 0%         | 0.0           | 8.7               | 0          | S/L              |
|                         | Big Thicket Hardin Co.  | 1          | 0%        | 0             | 0.8               | 0          | 1          | 0%         | 0.0           | 2.3               | 0          | S/L              |
|                         | Big Thicket Polk Co.    | 2          | 0%        | 0             | 6.8               | 0          | 1          | 0%         | 0.0           | 3.2               | 0          | S/L              |
|                         | Big Thicket Tyler Co.   | 2          | 0%        | 0             | 3.5               | 0          | 1          | 0%         | 0.0           | 3.1               | 0          | S/L              |
|                         | Angelina Co.            | 3          | 0%        | 0             | 15.4              | 0          | 2          | 0%         | 0.0           | 12.4              | 0          | S/L              |
|                         | Jasper Co.              | 3          | 0%        | 0             | 3.3               | 0          | 2          | 0%         | 0.0           | 12.4              | 0          | S/L              |
|                         | Nacogdoches Co.         | 2          | 0%        | 0             | 23.6              | 0          | 1          | 0%         | 0.0           | 10.8              | 0          | S/L              |
|                         | Newton Co.              | 3          | 0%        | 0             | 4.8               | 0          | 2          | 0%         | 0.0           | 5.2               | 0          | S/L              |
|                         | Polk Co.                | 3          | 0%        | 0             | 7.4               | 0          | 2          | 0%         | 0.0           | 23.3              | 0          | S/L              |
|                         | Sabine Co.              | 2          | 0%        | 0             | 8.1               | 0          | 2          | 0%         | 0.0           | 1.3               | 0          | S/L              |
|                         | San Augustine Co.       | 2          | 0%        | 0             | 18.6              | 0          | 2          | 0%         | 0.0           | 2.2               | 0          | S/L              |
|                         | Shelby Co.              | 2          | 0%        | 0             | 18.8              | 0          | 2          | 0%         | 0.0           | 1.3               | 0          | S/L              |
|                         | Trinity Co.             | 3          | 0%        | 0             | 21.0              | 0          | 2          | 0%         | 0.0           | 13.1              | 0          | S/L              |
|                         | Tyler Co.               | 3          | 0%        | 0             | 2.2               | 0          | 2          | 0%         | 0.0           | 4.9               | 0          | S/L              |
| <b>TX STATE AVERAGE</b> | <b>49</b>               | <b>0%</b>  | <b>0</b>  | <b>12.9</b>   | <b>0</b>          | <b>43</b>  | <b>0%</b>  | <b>0.0</b> | <b>9.1</b>    | <b>0</b>          | <b>S/L</b> |                  |

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| State               | Location           | 2012       |       |               |                   |            | 2013       |       |               |                   |            | 2013 Predictions |
|---------------------|--------------------|------------|-------|---------------|-------------------|------------|------------|-------|---------------|-------------------|------------|------------------|
|                     |                    | # of traps | % SPB | SPB/ trap/day | Clerids/ trap/day | 2011 spots | # of traps | % SPB | SPB/ trap/day | Clerids/ trap/day | 2012 spots |                  |
| LA                  | Calcasieu R. D.    | 3          | 0%    | 0             | 2.2               | 0          | 3          | 0%    | 0.0           | 1.0               | 0          | S/L              |
|                     | Catahoula R. D.    | 3          | 0%    | 0             | 8.7               | 0          | 3          | 0%    | 0.0           | 19.6              | 0          | S/L              |
|                     | Kisatchie R. D.    | 3          | 0%    | 0             | 2.4               | 0          | 3          | 0%    | 0.0           | 2.1               | 0          | S/L              |
|                     | Winn R. D.         | 3          | 0%    | 0             | 2                 | 0          | 3          | 0%    | 0.0           | 12.3              | 0          | S/L              |
|                     | Allen Pa.          |            |       |               |                   |            | 2          | 0%    | 0.0           | 0.6               | 0          | S/L              |
|                     | Beauregard Pa.     |            |       |               |                   |            | 2          | 0%    | 0.0           | 1.5               | 0          | S/L              |
|                     | Bienville Pa.      |            |       |               |                   |            | 1          | 0%    | 0.0           | 24.4              | 0          | S/L              |
|                     | Bossier Pa.        |            |       |               |                   |            | 2          | 0%    | 0.0           | 6.4               | 0          | S/L              |
|                     | Caddo Pa.          |            |       |               |                   |            | 2          | 0%    | 0.0           | 7.1               | 0          | S/L              |
|                     | Calcasieu Pa.      |            |       |               |                   |            | 1          | 0%    | 0.0           | 0.4               | 0          | S/L              |
|                     | Caldwell Pa.       |            |       |               |                   |            | 1          | 0%    | 0.0           | 9.3               | 0          | S/L              |
|                     | Claiborne Pa.      |            |       |               |                   |            | 1          | 0%    | 0.0           | 12.6              | 0          | S/L              |
|                     | De Soto Pa.        |            |       |               |                   |            | 1          | 0%    | 0.0           | 5.7               | 0          | S/L              |
|                     | East Feliciana Pa. |            |       |               |                   |            | 1          | 8%    | 0.1           | 1.2               | 0          | S/L              |
|                     | Evangelina Pa.     |            |       |               |                   |            | 2          | 0%    | 0             | 2.3               | 0          | S/L              |
|                     | Jackson Pa.        |            |       |               |                   |            | 1          | 0%    | 0             | 3.8               | 0          | S/L              |
|                     | La Salle Pa.       |            |       |               |                   |            | 1          | 0%    | 0             | 0.7               | 0          | S/L              |
|                     | Natchitoches Pa.   |            |       |               |                   |            | 2          | 0%    | 0             | 1.7               | 0          | S/L              |
|                     | Rapides Pa.        |            |       |               |                   |            | 4          | 0%    | 0             | 0.7               | 0          | S/L              |
|                     | Red River Pa.      |            |       |               |                   |            | 1          | 0%    | 0             | 7.6               | 0          | S/L              |
|                     | Sabine Pa.         |            |       |               |                   |            | 2          | 0%    | 0             | 1.8               | 0          | S/L              |
|                     | St. Helena Pa.     |            |       |               |                   |            | 1          | 0%    | 0             | 0.3               | 0          | S/L              |
|                     | St. Tammany Pa.    |            |       |               |                   |            | 2          | 0%    | 0             | 0.6               | 0          | S/L              |
|                     | Union Pa.          |            |       |               |                   |            | 1          | 0%    | 0             | 4.3               | 0          | S/L              |
|                     | Vernon Pa.         |            |       |               |                   |            | 2          | 0%    | 0             | 0.3               | 0          | S/L              |
|                     | Washington Pa.     |            |       |               |                   |            | 1          | 0%    | 0             | 0.6               | 0          | S/L              |
| West Feliciana Pa.  |                    |            |       |               |                   | 1          | 61%        | 0.6   | 0.4           | 0                 | S/L        |                  |
| LFC District 1 (NE) |                    | 7          | 0%    | 0             | 7                 | 0          |            |       |               |                   |            |                  |
| LFC District 3 (NC) |                    | 14         | 0%    | 0             | 3.4               | 0          |            |       |               |                   |            |                  |
| LFC District 4 (SE) |                    | 9          | 0%    | 0             | 2.9               | 0          |            |       |               |                   |            |                  |

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| State            | Location                                | 2012       |           |                |                    |            | 2013       |           |                |                    |            | 2013 Predictions |
|------------------|---|------------|-----------|----------------|--------------------|------------|------------|-----------|----------------|--------------------|------------|------------------|
|                  |   | # of traps | % SPB     | SPB/ trap/ day | Clerids/ trap/ day | 2011 spots | # of traps | % SPB     | SPB/ trap/ day | Clerids/ trap/ day | 2012 spots |                  |
| MS               | LFC District 6 (EC)                     | 6          | 0%        | 0              | 0.7                | 0          |            |           |                |                    |            |                  |
|                  | <b>LA STATE AVERAGE</b>                 | <b>48</b>  | <b>0%</b> | <b>0</b>       | <b>3.7</b>         | <b>0</b>   | <b>47</b>  | <b>0%</b> | <b>0.0</b>     | <b>7.6</b>         | <b>0</b>   | <b>S/L</b>       |
|                  | Bienville R. D.                         | 3          | 42%       | 5.5            | 7.6                | 0          | 3          | 60%       | 24.1           | 16.0               | 0          | I/M-H            |
|                  | Chickasawhay R.D.                       | 3          | 1%        | 0.1            | 9.2                | 0          | 3          | 0%        | 0.0            | 7.2                | 0          | S/L              |
|                  | Desoto N. F.                            | 3          | 1%        | 0              | 3.6                | 0          | 3          | 0%        | 0.0            | 12.1               | 0          | S/L              |
|                  | Holly Springs R.D.                      | 3          | 0%        | 0.1            | 18.7               | 0          | 3          | 3%        | 0.6            | 20.2               | 0          | S/L              |
|                  | Homochitto N.F. (with endo-brevicomini) | 3          | 6%        | 0.8            | 11.5               | 0          | 6          | 73%       | 128.1          | 48.1               | 912        | S/H              |
|                  | Near Homochitto NF (5 counties)         |            |           |                |                    |            | 5          | 44%       | 11.5           | 14.8               | 560        | I/M              |
|                  | Tombigbee R. D.                         | 3          | 7%        | 1.1            | 16.2               | 0          | 3          | 77%       | 51.3           | 15.5               | 0          | I/H              |
|                  | Benton Co.                              |            |           |                |                    |            | 1          | 2%        | 0.6            | 27.4               | 0          | S/L              |
|                  | Carroll Co.                             | 3          | 0%        | 0              | 20                 | 0          | 3          | 0%        | 0.0            | 16.1               | 0          | S/L              |
|                  | Copiah Co.                              | 3          | 0%        | 0              | 7                  | 0          | 2          | 1%        | 0.1            | 6.1                | 5          | S/L              |
|                  | Forrest Co.                             | 3          | 0%        | 0              | 3                  | 0          | 4          | 0%        | 0.0            | 2.5                | 0          | S/L              |
|                  | Green Co.                               |            |           |                |                    |            | 1          | 0%        | 0.0            | 7.2                | 0          | S/L              |
|                  | Itawamba Co.                            | 3          | 0%        | 0              | 11                 | 0          | 3          | 0%        | 0.0            | 5.9                | 0          | S/L              |
|                  | Jasper Co.                              |            |           |                |                    |            | 2          | 75%       | 14.8           | 4.8                | 11         | I/M              |
|                  | Jones Co.                               |            |           |                |                    |            | 1          | 0%        | 0.0            | 9.2                | 2          | S/L              |
|                  | Lafayette Co.                           |            |           |                |                    |            | 1          | 4%        | 1.1            | 28.6               | 0          | S/L              |
|                  | Leake Co.                               | 3          | 1%        | 0.3            | 42.6               | 0          | 3          | 10%       | 1.8            | 15.6               | 0          | S/L              |
|                  | Lincoln Co.                             | 3          | 0%        | 0              | 0.2                | 0          | 3          | 10%       | 0.2            | 1.8                | 7          | S/L              |
|                  | Marion Co.                              | 3          | 0%        | 0              | 0.7                | 0          | 3          | 0%        | 0.0            | 0.7                | 0          | S/L              |
|                  | Panola Co.                              | 3          | 0%        | 0              | 3.3                | 0          | 2          | 0%        | 0.0            | 5.8                | 0          | S/L              |
|                  | Perry Co.                               |            |           |                |                    |            |            | 2%        | 0.0            | 0.0                | 0          | S/L              |
|                  | Rankin Co.                              | 3          | 0%        | 0              | 8.7                | 0          | 3          | 0%        | 0.0            | 9.2                | 0          | S/L              |
|                  | Scott Co.                               | 3          | 0%        | 0              | 6.8                | 0          | 5          | 78%       | 25.3           | 7.0                | 0          | I/M-H            |
|                  | Smith Co.                               | 3          | 12%       | 0.7            | 5.3                | 0          | 5          | 58%       | 21.1           | 15.2               | 4          | I/M              |
|                  | Stone Co.                               | 3          | 0%        | 0              | 2.4                | 0          | 3          | 0%        | 0.0            | 1.2                | 0          | S/L              |
| Tallahatchie Co. |   |            |           |                |                    | 1          | 0%         | 0.0       | 4.1            | 0                  | S/L        |                  |
| Tishomingo Co.   | 3                                       | 5%         | 0.7       | 12.8           | 0                  | 3          | 22%        | 2.8       | 9.7            | 0                  | S/L        |                  |
| Wayne Co.        |   |            |           |                |                    | 1          | 0%         | 0.0       | 5.3            | 0                  | S/L        |                  |

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| State                   | Location                              | 2012       |            |               |                   |            | 2013       |            |               |                   |              | 2013 Predictions |
|-------------------------|---------------------------------------|------------|------------|---------------|-------------------|------------|------------|------------|---------------|-------------------|--------------|------------------|
|                         |                                       | # of traps | % SPB      | SPB/ trap/day | Clerids/ trap/day | 2011 spots | # of traps | % SPB      | SPB/ trap/day | Clerids/ trap/day | 2012 spots   |                  |
| AL <sup>1</sup>         | Wilkinson Co.                         |            |            |               |                   |            | 1          | 1%         | 0.1           | 10.0              | 18           | D/L              |
|                         | Winston County                        | 3          | 1%         | 0.2           | 21.8              | 0          | 3          | 3%         | 0.3           | 9.3               | 0            | S/L              |
|                         | <b>MS STATE AVERAGE</b>               | <b>60</b>  | <b>4%</b>  | <b>0.5</b>    | <b>10.6</b>       | <b>2</b>   | <b>80</b>  | <b>36%</b> | <b>9.5</b>    | <b>11.2</b>       | <b>1,068</b> | <b>I/M-H</b>     |
|                         | Bankhead R. D.                        | 3          | 27%        | 4             | 10.8              | 0          | 3          | 52%        | 10.6          | 10.0              | 0            | I/L              |
|                         | Oakmulgee R. D.                       | 3          | 3%         | 0.3           | 11                | 0          | 3          | 33%        | 17.6          | 35.6              | 0            | I/L-M            |
|                         | Shoal Creek R. D.                     | 3          | 6%         | 0.3           | 4.7               | 0          | 3          | 70%        | 21.9          | 9.5               | 0            | I/M              |
|                         | Talladega R.D.                        | 3          | 0%         | 0             | 2.5               | 0          | 3          | 3%         | 0.2           | 5.5               | 0            | S/L              |
|                         | Barbour Co.                           | 3          | 23%        | 3.8           | 16.1              | 0          | 3          | 17%        | 4.5           | 21.9              | 0            | S/L              |
|                         | Lowndes Co.                           | 3          | 5%         | 0.3           | 4.7               | 0          | 3          | 8%         | 0.4           | 4.4               | 20           | S/L              |
|                         | Monroe Co.                            | 3          | 41%        | 0.5           | 0.8               | 0          | 3          | 11%        | 0.5           | 4.4               | 0            | S/L              |
| Tallapoosa Co.          | 3                                     | 16%        | 0.2        | 1.1           | 0                 | 3          | 31%        | 1.7        | 3.6           | 0                 | S/L          |                  |
| <b>AL STATE AVERAGE</b> | <b>24</b>                             | <b>16%</b> | <b>1.2</b> | <b>6.5</b>    | <b>28</b>         | <b>24</b>  | <b>38%</b> | <b>7.2</b> | <b>11.9</b>   | <b>57</b>         | <b>I/L-M</b> |                  |
| GA                      | Ft Stewart Army Base                  | 3          | 34%        | 1.6           | 3.2               |            | 3          | 54%        | 7.8           | 6.7               | 0            | I/L              |
|                         | Conasauga R. D. (Chattah./Oconee NF)  | 3          | 21%        | 1.6           | 6.1               |            | 3          | 8%         | 1.1           | 12.2              | 0            | S/L              |
|                         | Oconee R.D.                           | 3          | 6%         | 1.1           | 16.5              |            | 3          | 8%         | 5.5           | 60.7              | 0            | S/L              |
|                         | Chattooga River R.D.(Chat./Oconee NF) | 3          | 53%        | 3.5           | 3.1               | 1          | 3          | 30%        | 2.2           | 5.2               | 0            | S/L              |
|                         | Baldwin Co.                           | 1          | 2%         | 0.3           | 14.4              | 0          | 1          | 10%        | 0.6           | 4.9               | 0            | S/L              |
|                         | Banks Co.                             | 1          | 16%        | 0.3           | 1.6               | 0          | 1          | 22%        | 0.1           | 0.5               | 0            | S/L              |
|                         | Bartow Co.                            |            |            |               |                   |            | 1          | 9%         | 0.6           | 5.8               | 0            | S/L              |
|                         | Bibb Co.                              |            |            |               |                   |            | 1          | 29%        | 2.6           | 6.4               | 0            | S/L              |
|                         | Bulloch Co.                           | 1          | 10%        | 0.5           | 4.5               | 0          | 1          | 30%        | 2             | 4.6               | 0            | S/L              |
|                         | Camden Co.                            |            |            |               |                   |            | 1          | 75%        | 0.3           | 0.1               | 0            | S/L              |
|                         | Carroll Co.                           |            |            |               |                   |            | 1          | 20%        | 0             | 0.1               | 0            | S/L              |
|                         | Chattahoochee Co.                     | 1          | 0%         | 0             | 9.7               | 0          | 1          | 4%         | 0.1           | 2.5               | 0            | S/L              |
|                         | Chattooga Co.                         |            |            |               |                   |            | 1          | 3%         | 0             | 1.1               | 0            | S/L              |
|                         | Clarke Co.                            |            |            |               |                   |            | 1          | 12%        | 2             | 14.8              | 0            | S/L              |
|                         | Dodge Co.                             |            |            |               |                   |            | 1          | 1%         | 0             | 2.8               | 0            | S/L              |
|                         | Dougherty Co.                         |            |            |               |                   |            | 1          | 2%         | 0.1           | 5.7               | 0            | S/L              |
| Emanuel Co.             | 1                                     | 1%         | 0          | 7.1           | 0                 | 1          | 1%         | 0          | 3.4           | 0                 | S/L          |                  |

Table 1: Southern Pine Beetle Predictions for 2013

Compiled by Ron Billings, Texas A&amp;M Forest Service, based on data received from South-wide cooperators as of June 6, 2013

| State      | Location                | 2012       |           |                |                    |            | 2013       |            |                |                    |            | 2013 Predictions |
|------------|-------------------------|------------|-----------|----------------|--------------------|------------|------------|------------|----------------|--------------------|------------|------------------|
|            |                         | # of traps | % SPB     | SPB/ trap/ day | Clerids/ trap/ day | 2011 spots | # of traps | % SPB      | SPB/ trap/ day | Clerids/ trap/ day | 2012 spots |                  |
| GA         | Floyd Co.               | 1          | 7%        | 0.3            | 3.4                | 0          | 1          | 4%         | 0.1            | 3.7                | 0          | S/L              |
|            | Franklin Co.            |            |           |                |                    |            | 1          | 94%        | 12.7           | 0.8                | 0          | I/M              |
|            | Glynn Co.               |            |           |                |                    |            | 1          | 86%        | 0.2            | 0                  | 0          | S/L              |
|            | Gordon Co.              |            |           |                |                    |            | 1          | 16%        | 1.6            | 8.1                | 0          | S/L              |
|            | Greene Co.              |            |           |                |                    |            | 1          | 9%         | 2.1            | 22.3               | 0          | S/L              |
|            | Hancock Co.             | 1          | 2%        | 0.4            | 21.1               | 0          | 1          | 13%        | 1.7            | 11.2               | 0          | S/L              |
|            | Harris Co.              |            |           |                |                    |            | 1          | 0%         | 0              | 1.8                | 0          | S/L              |
|            | Hart Co.                | 1          | 1%        | 0.1            | 5.1                | 0          | 1          | 15%        | 0.1            | 0.7                | 0          | S/L              |
|            | Jackson Co.             | 1          | 22%       | 2.6            | 11.6               | 0          | 1          | 85%        | 9.6            | 1.6                | 0          | I/M              |
|            | Jenkins Co.             | 1          | 0%        | 0.3            | 84.4               | 0          | 1          | 8%         | 0.8            | 9                  | 0          | S/L              |
|            | Marion Co.              |            |           |                |                    |            | 1          | 2%         | 0.1            | 3.4                | 0          | S/L              |
|            | Morgan Co.              |            |           |                |                    |            | 1          | 33%        | 1.3            | 2.6                | 0          | S/L              |
|            | Murry Co.               |            |           |                |                    |            | 1          | 3%         | 0.1            | 2.6                | 0          | S/L              |
|            | Randolph Co.            |            |           |                |                    |            | 1          | 8%         | 1.4            | 16.3               | 0          | S/L              |
|            | Stewart Co.             | 2          | 6%        | 0.3            | 4.1                | 0          | 1          | 1%         | 0.1            | 26.9               | 0          | S/L              |
|            | Talbot Co.              |            |           |                |                    |            | 1          | 1%         | 0.1            | 5.9                | 0          | S/L              |
|            | Thomas Co.              |            |           |                |                    |            | 1          | 0%         | 0              | 0.4                | 0          | S/L              |
|            | Walker Co.              |            |           |                |                    |            | 1          | 5%         | 0.1            | 1.5                | 0          | S/L              |
|            | Webster Co.             | 1          | 2%        | 0.1            | 3.0                | 0          | 1          | 2%         | 0.1            | 6.1                | 0          | S/L              |
| Wilcox Co. |                         |            |           |                |                    | 1          | 0%         | 0          | 78.5           | 0                  | S/L        |                  |
|            | <b>GA STATE AVERAGE</b> | <b>10</b>  | <b>3%</b> | <b>0.2</b>     | <b>7.9</b>         | <b>1</b>   | <b>45</b>  | <b>13%</b> | <b>1.6</b>     | <b>9.5</b>         | <b>0</b>   | <b>I/L</b>       |
| KY         | London R.D.             | 2          | 0%        | 0              | 0.6                | 0          | 2          | 0%         | 0.0            | 5.5                | 0          | S/L              |
|            | Stearns RD              | 2          | 0%        | 0              | 0.6                | 0          | 2          | 0%         | 0.0            | 0.9                | 0          | S/L              |
|            | <b>KY STATE AVERAGE</b> | <b>4</b>   | <b>0%</b> | <b>0</b>       | <b>0.6</b>         | <b>0</b>   | <b>4</b>   | <b>0%</b>  | <b>0.0</b>     | <b>3.2</b>         | <b>0</b>   | <b>S/L</b>       |
| TN         | Nolichucky/Unaka R. D.  | 3          | 0%        | 0              | 0.4                | 0          | 3          | 2%         | 0.0            | 0.7                | 0          | S/L              |
|            | Ocoee R. D.             | 3          | 0%        | 0              | 1.4                | 0          |            | 0%         | 0.0            | 0.6                | 0          | S/L              |
|            | Chester Co.             | 2          | 0%        | 0              | 16.9               | 0          | 1          | 0%         | 0.0            | 18.6               | 0          | S/L              |
|            | Marion Co.              | 2          | 0%        | 0              | 1.8                | 0          | 1          | 0%         | 0.0            | 1.9                | 0          | S/L              |
|            | Rhea Co.                | 2          | 0%        | 0              | 3                  | 0          | 1          | 0%         | 0.0            | 2.5                | 0          | S/L              |
|            | Wayne Co.               | 2          | 0%        | 0              | 1.9                | 0          | 1          | 0%         | 0.0            | 6.9                | 0          | S/L              |
|            | <b>TN STATE AVERAGE</b> | <b>14</b>  | <b>0%</b> | <b>0</b>       | <b>4.2</b>         | <b>0</b>   |            | <b>0%</b>  | <b>0.0</b>     | <b>5.2</b>         | <b>0</b>   | <b>S/L</b>       |



Table 1: Southern Pine Beetle Predictions for 2013

Compiled by Ron Billings, Texas A&amp;M Forest Service, based on data received from South-wide cooperators as of June 6, 2013

| State        | Location                | 2012       |            |               |                   |            | 2013       |            |               |                   |            | 2013 Predictions |
|--------------|-------------------------|------------|------------|---------------|-------------------|------------|------------|------------|---------------|-------------------|------------|------------------|
|              |                         | # of traps | % SPB      | SPB/ trap/day | Clerids/ trap/day | 2011 spots | # of traps | % SPB      | SPB/ trap/day | Clerids/ trap/day | 2012 spots |                  |
| VA           | New Castle R. D.        | 3          | 6%         | 0.3           | 4.1               | 0          | 3          | 0%         | 0.0           | 0.5               | 0          | S/L              |
|              | Appomattox Co.          | 3          | 57%        | 14.6          | 11.9              | 0          | 2          | 11%        | 0.6           | 4.9               | 0          | S/L              |
|              | Buckingham Co.          |            |            |               |                   |            | 2          | 5%         | 0.9           | 15.4              | 0          | S/L              |
|              | Chesterfield Co.        | 3          |            |               |                   |            | 3          | 26%        | 17.8          | 50                | 0          | I/L-M            |
|              | Cumberland Co.          | 3          | 30%        | 6.1           | 14.4              | 0          | 4          | 22%        | 14.8          | 53                | 0          | I/L              |
|              | Prince Edward           | 3          | 27%        | 1.6           | 4.2               | 0          | 4          | 12%        | 1.3           | 9                 | 0          | S/L              |
|              | <b>VA STATE AVERAGE</b> | <b>15</b>  | <b>24%</b> | <b>4.5</b>    | <b>4.5</b>        | <b>31</b>  | <b>18</b>  | <b>21%</b> | <b>5.9</b>    | <b>22.1</b>       | <b>23</b>  | <b>I/L</b>       |
| FL           | Alachua Co.             | 3          | 10%        | 0             | 0.2               | 0          | 4          | 54%        | 0.7           | 0.6               | 0          | S/L              |
|              | Baker Co.               | 1          | 83%        | 0.2           | 0                 | 1          | 1          | 100%       | 0.1           | 0.0               | 0          | S/L              |
|              | Bradford-Union Co.      | 1          | 0%         | 0             | 0.1               | 0          | 1          | 60%        | 0.1           | 0.1               | 0          | S/L              |
|              | Clay Co.                | 1          | 0%         | 0             | 1.5               | 0          | 1          | 85%        | 0.6           | 0.1               | 0          | S/L              |
|              | Columbia Co.            | 3          | 10%        | 0.1           | 0.5               | 0          | 3          | 42%        | 0.5           | 0.7               | 0          | S/L              |
|              | Duval Co.               | 1          | 38%        | 0.9           | 1.4               | 0          | 1          | 83%        | 0.5           | 0.9               | 1          | D/L              |
|              | Gadsden Co.             | 2          | 37%        | 0.3           | 0.4               | 0          | 2          | 0%         | 0.0           | 0.1               | 1          | D/L              |
|              | Hamilton Co.            | 2          | 19%        | 0.3           | 1.3               | 0          | 1          | 0%         | 0.0           | 0.1               | 0          | S/L              |
|              | Hernando Co.            | 1          | 0%         | 0             | 0                 | 0          | 1          | 0%         | 0.0           | 0.0               | 0          | S/L              |
|              | Holmes Co.              | 1          | 0%         | 0             | 10.7              | 0          | 1          | 2%         | 0.1           | 6.6               | 0          | S/L              |
|              | Jackson Co.             | 1          | 2%         | 0.1           | 4.3               | 0          | 1          | 8%         | 0.2           | 2.1               | 0          | S/L              |
|              | Jefferson Co.           | 1          | 33%        | 0             | 0.1               | 0          | 1          | 33%        | 0.1           | 0.1               | 0          | S/L              |
|              | Lake Co.                | 1          | 0%         | 0             | 2.5               | 0          | 1          | 0%         | 0.0           | 0.9               | 0          | S/L              |
|              | Leon Co.                | 1          | 25%        | 0.1           | 0.3               | 0          | 1          | 60%        | 0.1           | 0.1               | 0          | S/L              |
|              | Levy Co.                | 1          | 0%         | 0             | 0.5               | 0          | 1          | 0%         | 0.0           | 0.0               | 0          | S/L              |
|              | Madison Co.             | 1          | 69%        | 1             | 0.5               | 0          | 1          | 100%       | 0.0           | 0.0               | 0          | S/L              |
|              | Marion Co.              | 3          | 6%         | 0             | 0.2               | 0          | 3          | 71%        | 0.2           | 0.1               | 3          | D/L              |
|              | Nassau Co.              | 2          | 50%        | 0             | 0.1               | 0          | 2          | 60%        | 0.1           | 0.1               | 0          | S/L              |
|              | Okaloosa Co.            | 2          | 0%         | 0             | 5.8               | 0          | 2          | 1%         | 0.0           | 2.1               | 0          | S/L              |
|              | Putnam Co.              | 1          | 22%        | 0.1           | 0.3               | 0          | 1          | 92%        | 0.4           | 0.0               | 0          | S/L              |
| Seminole Co. | 1                       | 0%         | 0          | 0             | 0                 | 1          | 0%         | 0.0        | 0.0           | 0                 | S/L        |                  |
| St Johns     | 1                       | 100%       | 14.5       | 0             | 1                 | 2          | 100%       | 5.2        | 0.0           | 3                 | S/L        |                  |
| Suwannee Co. | 2                       | 14%        | 0          | 0.2           | 0                 | 2          | 80%        | 1.6        | 0.4           | 0                 | S/L        |                  |
| Walton Co.   | 1                       | 14%        | 0.4        | 2.4           | 0                 | 1          | 4%         | 0.1        | 1.7           | 0                 | S/L        |                  |



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| State           | Location                | 2012       |            |               |                   |            | 2013       |            |               |                   |            | 2013 Predictions |
|-----------------|-------------------------|------------|------------|---------------|-------------------|------------|------------|------------|---------------|-------------------|------------|------------------|
|                 |                         | # of traps | % SPB      | SPB/ trap/day | Clerids/ trap/day | 2011 spots | # of traps | % SPB      | SPB/ trap/day | Clerids/ trap/day | 2012 spots |                  |
| SC <sup>1</sup> | Washington Co.          | 1          | 3%         | 0.4           | 12.4              | 0          | 1          | 0%         | 0.0           | 0.9               | 0          | S/L              |
|                 | <b>FL STATE AVERAGE</b> | <b>36</b>  | <b>28%</b> | <b>0.7</b>    | <b>1.8</b>        | <b>2</b>   | <b>37</b>  | <b>41%</b> | <b>0.4</b>    | <b>0.7</b>        | <b>11</b>  | <b>S/L</b>       |
|                 | Enoree R. D.            | 3          | 0%         | 0             | 14.2              | 0          | 3          | 0%         | 0.0           | 5.8               | 0          | S/L              |
|                 | Francis Marion N.F.     |            |            |               |                   |            | 3          | 19%        | 1.2           | 5.1               | 0          | S/L              |
|                 | Long Cane R. D.         | 3          | 15%        | 2.6           | 14.7              | 0          | 3          | 8%         | 6.0           | 66.0              | 2          | S/L              |
|                 | Savannah River Site     | 3          | 2%         | 0.1           | 5.9               | 0          | 3          | 2%         | 0.3           | 14.5              | 0          | S/L              |
|                 | Abbeville Co.           | 3          | 1%         | 0.1           | 20.2              | 0          | 3          | 4%         | 0.7           | 19.8              | 0          | S/L              |
|                 | Anderson Co.            | 3          | 2%         | 0.1           | 2.7               | 0          | 3          | 0%         | 0.0           | 1.7               | 0          | S/L              |
|                 | Beaufort Co.            | 3          | 43%        | 0.1           | 0.1               | 0          | 3          | 8%         | 0.0           | 0.1               | 0          | S/L              |
|                 | Berkeley Co.            | 3          | 21%        | 0.1           | 0.3               | 0          | 3          | 12%        | 0.1           | 0.5               | 0          | S/L              |
|                 | Charleston Co.          | 3          | 1%         | 0.1           | 1.4               | 0          | 3          | 13%        | 0.4           | 3.0               | 0          | S/L              |
|                 | Cherokee Co.            | 3          | 0%         | 0.1           | 6.6               | 0          | 3          | 0%         | 0.0           | 6.4               | 0          | S/L              |
|                 | Chester Co.             | 3          | 0%         | 0.1           | 5.7               | 0          | 3          | 0%         | 0.0           | 2.6               | 0          | S/L              |
|                 | Colleton Co.            | 3          | 0%         | 0             | 1.8               | 0          | 3          | 0%         | 0.0           | 1.3               | 0          | S/L              |
|                 | Dorchester Co.          | 3          | 0%         | 0.1           | 5.3               | 0          | 3          | 1%         | 0.0           | 1.2               | 0          | S/L              |
|                 | Edgefield Co.           | 3          | 3%         | 0.2           | 7.1               | 0          | 2          | 12%        | 1.2           | 9.1               | 1          | S/L              |
|                 | Fairfield Co.           | 3          | 1%         | 0.2           | 34.9              | 0          | 3          | 0%         | 0.0           | 15.3              | 0          | S/L              |
|                 | Florence Co.            | 3          | 1%         | 0.1           | 3                 | 0          | 2          | 4%         | 0.0           | 1.4               | 0          | S/L              |
|                 | Georgetown Co.          | 3          | 2%         | 0.1           | 5.2               | 0          | 2          | 2%         | 0.1           | 5.3               | 0          | S/L              |
|                 | Greenville Co.          | 3          | 1%         | 0.1           | 2.2               | 0          | 3          | 0%         | 0.0           | 3.5               | 0          | S/L              |
| Greenwood Co.   | 3                       | 4%         | 0.7        | 16.6          | 0                 | 3          | 2%         | 0.4        | 15.3          | 0                 | S/L        |                  |
| Hampton Co.     | 3                       | 12%        | 0.2        | 1.2           | 0                 | 3          | 1%         | 0.0        | 2.9           | 0                 | S/L        |                  |
| Horry Co.       | 3                       | 6%         | 0.1        | 0.6           | 0                 | 3          | 0%         | 0.0        | 0.7           | 0                 | S/L        |                  |
| Jasper Co.      | 3                       | 5%         | 0.1        | 1.1           | 0                 | 3          | 1%         | 0.0        | 1.8           | 0                 | S/L        |                  |
| Kershaw Co.     | 3                       | 2%         | 0.1        | 3.7           | 0                 | 3          | 1%         | 0.0        | 4.8           | 0                 | S/L        |                  |
| Lancaster Co.   | 3                       | 0%         | 0.1        | 7.5           | 0                 | 3          | 0%         | 0.0        | 4.9           | 0                 | S/L        |                  |
| Laurens Co.     | 3                       | 0%         | 0          | 4.2           | 0                 | 3          | 1%         | 0.0        | 2.2           | 0                 | S/L        |                  |
| Lexington Co.   | 3                       | 1%         | 0.1        | 6.3           | 0                 | 3          | 1%         | 0.0        | 4.5           | 0                 | S/L        |                  |
| McCormick Co.   | 3                       | 4%         | 0.3        | 6.5           | 0                 | 2          | 41%        | 19.1       | 27.1          | 0                 | I-M        |                  |
| Newberry Co.    | 3                       | 1%         | 0.2        | 18.4          | 0                 | 2          | 1%         | 0.1        | 9.5           | 0                 | S/L        |                  |

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| State                   | Location                    | 2012       |            |               |                   |            | 2013       |            |               |                   |            | 2013 Predictions |
|-------------------------|-----------------------------|------------|------------|---------------|-------------------|------------|------------|------------|---------------|-------------------|------------|------------------|
|                         |                             | # of traps | % SPB      | SPB/ trap/day | Clerids/ trap/day | 2011 spots | # of traps | % SPB      | SPB/ trap/day | Clerids/ trap/day | 2012 spots |                  |
| NC                      | Oconee Co.                  | 3          | 6%         | 0.3           | 4.1               | 0          | 3          | 4%         | 0.1           | 2.1               | 0          | S/L              |
|                         | Pickens Co.                 | 3          | 1%         | 0.1           | 1.8               | 0          | 3          | 2%         | 0.0           | 1.0               | 0          | S/L              |
|                         | Richland Co.                | 3          | 0%         | 0             | 4.3               | 0          | 3          | 1%         | 0.0           | 3.6               | 0          | S/L              |
|                         | Saluda Co.                  | 3          | 1%         | 0.1           | 8.1               | 0          | 2          | 3%         | 0.2           | 7.6               | 0          | S/L              |
|                         | Spartanburg Co.             | 3          | 1%         | 0.1           | 4.9               | 0          | 3          | 0%         | 0.0           | 7.8               | 0          | S/L              |
|                         | Union Co.                   | 3          | 0%         | 0             | 2.6               | 0          | 3          | 0%         | 0.0           | 4.1               | 0          | S/L              |
|                         | Williamsburg Co.            |            |            |               |                   |            | 2          | 0%         | 0.0           | 0.8               | 0          | S/L              |
|                         | York Co.                    | 3          | 1%         | 0.1           | 5.9               | 0          | 3          | 0%         | 0.0           | 2.4               | 0          | S/L              |
|                         | <b>SC STATE AVERAGE</b>     | <b>102</b> | <b>2%</b>  | <b>0.1</b>    | <b>6.1</b>        | <b>0</b>   | <b>101</b> | <b>17%</b> | <b>0.8</b>    | <b>7.4</b>        | <b>3</b>   | <b>I/L</b>       |
|                         | Appalachian R. D.           | 3          | 0%         | 0             | 2.1               | 0          | 3          | 0%         | 0.0           | 4.1               | 0          | S/L              |
|                         | Croatan N. F.               | 3          | 1%         | 0.1           | 5.7               | 0          | 3          | 4%         | 0.3           | 9.0               | 0          | S/L              |
|                         | Tusquitte R.D. Nantahala NF | 3          | 1%         | 0             | 1                 | 0          | 3          | 0%         | 0.0           | 0.9               | 0          | S/L              |
|                         | Grandfather R. D.           | 3          | 0%         | 0             | 1.7               | 0          | 3          | 0%         | 0.0           | 1.2               | 0          | S/L              |
|                         | Uwharrie R. D.              | 3          | 9%         | 0.2           | 1.6               | 0          | 3          | 1%         | 0.0           | 1.7               | 0          | S/L              |
|                         | Beaufort Co.                | 1          | 14%        | 0.3           | 1.8               | 0          | 3          | 3%         | 0.3           | 8.1               | 0          | S/L              |
|                         | Brunswick Co.               | 3          | 0%         | 0             | 0.5               | 0          | 3          | 0%         | 0             | 0.9               | 0          | S/L              |
|                         | Columbus Co.                |            |            |               |                   |            | 3          | 0%         | 0             | 3.5               | 0          | S/L              |
|                         | Craven Co.                  | 2          | 5%         | 0.2           | 4.5               | 0          | 3          | 5%         | 0.5           | 8.1               | 0          | S/L              |
|                         | Davidson Co.                | 3          | 14%        | 0.2           | 0.9               | 0          | 3          | 17%        | 0.2           | 0.9               | 0          | S/L              |
| Johnston Co.            | 3                           | 0%         | 0          | 6.5           | 0                 | 3          | 0%         | 0          | 9             | 0                 | S/L        |                  |
| Macon Co.               | 3                           | 1%         | 0          | 1             | 0                 | 3          | 5%         | 0.1        | 1.7           | 0                 | S/L        |                  |
| Nash Co.                | 3                           | 0%         | 0          | 5             | 0                 | 3          | 0%         | 0          | 6.3           | 0                 | S/L        |                  |
| Orange Co.              | 3                           | 4%         | 0.6        | 14.7          | 0                 | 3          | 0%         | 0.4        | 13.1          | 0                 | S/L        |                  |
| <b>NC STATE AVERAGE</b> | <b>36</b>                   | <b>3%</b>  | <b>0.1</b> | <b>2.2</b>    | <b>0</b>          | <b>42</b>  | <b>2%</b>  | <b>0.1</b> | <b>4.9</b>    | <b>0</b>          | <b>S/L</b> |                  |
| MD                      | Dorchester Co.              |            |            |               |                   |            |            |            |               |                   |            |                  |
|                         | Somerset Co.                |            |            |               |                   |            |            |            |               |                   |            |                  |
|                         | Talbot Co.                  |            |            |               |                   |            |            |            |               |                   |            |                  |
|                         | Worchester Co.              |            |            |               |                   |            |            |            |               |                   |            |                  |
|                         | <b>MD State Average</b>     |            |            |               |                   |            |            |            |               |                   |            |                  |
| DE                      | Sussex Co.                  | 4          | 6%         | 0.2           | 2.3               | 0          | 4          | 0%         | 0.0           | 5.9               | 8          | S/L              |
|                         | <b>DE STATE AVERAGE</b>     | <b>4</b>   | <b>6%</b>  | <b>0.2</b>    | <b>2.3</b>        | <b>0</b>   | <b>4</b>   | <b>0%</b>  | <b>0.0</b>    | <b>5.9</b>        | <b>8</b>   | <b>S/L</b>       |

**Table 1: Southern Pine Beetle Predictions for 2013**  
 Compiled by Ron Billings, Texas A&M Forest Service, based on data received from South-wide cooperators as of June 6, 2013

| State | Location                | 2012       |       |                | 2013               |            |       | 2013 Predictions |                |                    |            |
|-------|-------------------------|------------|-------|----------------|--------------------|------------|-------|------------------|----------------|--------------------|------------|
|       |                         | # of traps | % SPB | SPB/ trap/ day | Clerids/ trap/ day | # of traps | % SPB |                  | SPB/ trap/ day | Clerids/ trap/ day | 2012 spots |
| NJ    | Atlantic Co.            |            |       |                |                    |            |       |                  |                |                    |            |
|       | Bass River State Park   |            |       |                |                    |            |       |                  |                |                    |            |
|       | Cape May Co.            |            |       |                |                    |            |       |                  |                |                    |            |
|       | Cumberland Co.          |            |       |                |                    |            |       |                  |                |                    |            |
|       | Salem Co.               |            |       |                |                    |            |       |                  |                |                    |            |
|       | Wharton State Park      |            |       |                |                    |            |       |                  |                |                    |            |
|       | <b>NJ STATE AVERAGE</b> |            |       |                |                    |            |       |                  |                |                    |            |

<sup>6</sup> D=Declining, S=Static, I=Increasing  
<sup>7</sup> L=Low, M=Moderate, H=High, O=Outbreak  
 \*2013 Lures = Sirex lure (70% alpha-pine, 30% beta-pinene) used on all traps (with 2 frontal in capsules). All traps deployed without endo-brevicomin, except on the Homochitto N.F. in MS.

**Table 2: Summary Of South-wide Southern Pine Beetle Trend Predictions For 2013**  
 Compiled by Ron Billings, Texas A&M Forest Service, based on data received from South-wide cooperators as of June 6, 2013

| State          | 2012                     |                          |       |                |                    | 2013                     |                          |       |                |                    | 2013 Prediction Trend/Level | Most likely locations for SPB Activity in 2013   |
|----------------|--------------------------|--------------------------|-------|----------------|--------------------|--------------------------|--------------------------|-------|----------------|--------------------|-----------------------------|--|
|                | No. of infestations 2011 | No. of locations trapped | % SPB | SPB/ trap/ day | Clerids/ trap/ day | No. of infestations 2012 | No. of locations trapped | % SPB | SPB/ trap/ day | Clerids/ Trap/ day |                             |  |
| Oklahoma       | 0                        | 3                        | 0%    | 0              | 9.0                | 0                        | 3                        | 0%    | 0.0            | 9.6                | Static/Low                  |  |
| Arkansas       | 0                        | 10                       | 0%    | 0              | 8.0                | 0                        | 7                        | 0%    | 0.0            | 16.4               | Static/Low                  |  |
| Texas          | 0                        | 17                       | 0%    | 0              | 13.0               | 0                        | 17                       | 0%    | 0.0            | 9.1                | Static/Low                  |  |
| Louisiana      | 0                        | 8                        | 0%    | 0              | 3.7                | 0                        | 27                       | 0%    | 0.0            | 8.4                | Static/Low                  |  |
| Mississippi    | 2                        | 20                       | 4%    | 0.5            | 10.6               | 1068                     | 26                       | 36%   | 9.8            | 10.8               | Increasing Moderate -High   | Homochitto N.F., Tombigbee N.F., Bienville N.F., Jasper, Scott & Smith Co.                   |
| Alabama        | 28                       | 8                        | 16%   | 1.2            | 6.5                | 57                       | 8                        | 38%   | 7.2            | 11.9               | Increasing/Low -Moderate    | Bankhead N.F., Oakmulgee R.D., Shoal Creek R.D.  |
| Georgia        | 1                        | 27                       | 3%    | 0.4            | 14.0               | 0                        | 37                       | 13%   | 1.6            | 9.5                | Increasing/Low              | Fort Stewart Army Base, Franklin Co., Jackson Co.  |
| Kentucky       | 0                        | 2                        | 0%    | 0              | 0.6                | 0                        | 2                        | 0%    | 0              | 3.2                | Static/Low                  |  |
| Tennessee      | 0                        | 6                        | 0%    | 0              | 4.2                | 0                        | 6                        | 0%    | 0.0            | 5.2                | Static/Low                  |  |
| Virginia       | 31                       | 6                        | 33%   | 5.0            | 5.0                | 23                       | 0                        | 21%   | 5.9            | 22.1               | Increasing/Low              | Chesterfield Co., Cumberland Co.   |
| Florida        | 2                        | 26                       | 28%   | 0.7            | 1.8                | 11                       | 25                       | 41%   | 0.4            | 0.7                | Static/Low                  | St. Johns Co.  |
| South Carolina | 0                        | 35                       | 2%    | 0.1            | 6.1                | 3                        | 36                       | 17%   | 0.8            | 7.4                | Static/Low                  | McCormick Co., Edgefield Co.   |
| North Carolina | 0                        | 21                       | 3%    | 0.1            | 3.3                | 0                        | 14                       | 2%    | 0.1            | 4.9                | Static/Low                  |  |
| Maryland       | 0                        | 4                        |       |                |                    |                          |                          |       |                |                    |                             |  |
| Delaware       | 0                        | 1                        | 6%    | 0.2            | 2.3                | 8                        | 1                        | 0%    | 0              | 5.9                | Static/Low                  | Sussex Co.   |
| New Jersey     |                          |                          |       |                |                    |                          |                          |       |                |                    |                             |  |
| 16 States      | 64                       | 194                      | 9%    | 0.6            | 6.3                | 1170                     | 209                      | 30%   | 1.8            | 8.9                | Increasing/ Low-Moderate    | Increasing SPB activity in MS and AL and local areas in GA, SC and VA; Low levels elsewhere. |