

## 2020 Southern Pine Beetle Spring Pheromone Survey Results

The southern pine beetle (SPB) is one of the most destructive forest pests in the southern and eastern United States. The SPB will attack most species of pines, but dense, mature stands of loblolly, shortleaf, and/or Virginia pines are the most vulnerable. The location and intensity of SPB outbreaks will vary from year to year. The outcome of SPB infestations is based on many factors. The condition of the pine stand is one factor, but extended adverse environmental conditions and SPB population levels are other contributing factors. The SPB spring pheromone survey is conducted every year to monitor population levels in the state.

Several southeastern states participate in the annual SPB spring pheromone survey. SPB traps are deployed in several counties throughout each state to monitor the number of adult SPBs and their clerid predators. Traps are baited with a lure – SPB pheromone (frontalin and *endo*-brevicomin) and a polyethylene blue sleeve (primarily *alpha*-pinene). The traps are deployed in early spring, generally from late February to early March and remain in place from 4 to 6 weeks. The traps are checked once a week by retrieving the insects from the trap's collection cup and counting the number of SPBs and clerid beetles. After the 6-week survey period, the traps are retrieved from the site. The results of the number of SPBs and clerid beetles caught each week are used to obtain population levels and to predict infestation trends in the state.

The survey data has been collected and submitted by Alabama government employees and analyzed by researchers from Bates College, Dartmouth College, and the US Forest Service. Since 2018, an updated analytical model has been used to predict infestation trends more accurately. The final report is not completed, but a preliminary summary has been deduced for the region.

This year, Alabama is predicted to have a low number of SPB infestations. More specifically, high risk counties are expected to have no more than 6 to 9 SPB spots. The overall prediction for the state, Alabama has a 16% chance of having any SPB spots this active season.

**\*NOTE:** The analysis only predicts the SPB infestation trend for the state. A subsample of counties in the state and National Forests are selected for the SPB spring pheromone survey. This subset of trapping locations is inferring the prediction for the entire state. Hence, the information is by no means absolute confirmation on what will occur in Alabama.