Forest Health Highlights for 2020

By: Chandler Barton, ADA-FD Division Forester

T he Arkansas Department of Agriculture – Forestry Division (hereafter simply the Forestry Division) assists non-industrial private landowners with forest management decisions. Forestry Division field personnel make forest health recommendations and can respond to reports of tree mortality caused by forest disturbances, such as insects and diseases. This report briefly summarizes the forest insect and disease issues in Arkansas that were identified during the 2020 calendar year.

Forest Resource Introduction
Arkansas’s forests cover 19 million acres, which is approximately 56% percent of the state’s land area. The majority of the state’s forested land, some 13.1 million acres, is in non-industrial private ownership, while approximately 2.5 million acres is national forest. Major forest types in the state include oak-hickory, loblolly-shortleaf pine, oak-pine, and bottomland hardwood.

This report will reference the Level III Ecoregions shown in the map below. Loblolly pine dominates the South Central Plains ecoregion, and it is the most abundant tree species by volume, and shortleaf pine follows second in statewide volume estimates. Shortleaf pine is abundant in the Ouachita Mountains.

The most abundant hardwood species, listed in order of greatest value, are white oak, sweetgum, post oak, northern red oak, black oak, and southern red oak.

Needlecast fungi were also confirmed to be present (Lophodermium sp.). These researchers are working to determine the factors responsible for outbreaks of needle blight in loblolly pine.

Severe landscape-scale issues with needle blight are not discussed in scientific literature, especially with respect to loblolly pine.

Interestingly, specific loblolly stands near Lake Winona were affected while pines in the adjacent oak-shortleaf stands did not show symptoms. The open structure of these planted loblolly stands allows wind to pass through with little interruption.

The dispersal and success of needle blight and needlecast spores could be increased from this lack of wind protection in open vs. closed loblolly stands. It could also be assumed that these planted loblolly stands feature susceptible genetic properties.
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Tian, Pelikki Timber Outlook Report for 2021, con’t.

This recession also affected our timber companies this past year, but results were mixed. Some like Georgia-Pacific, (GP) announced closures of a few of their locations. GP closed parts of its plant in Crockett and a particleboard plant in Hope, while Sun Paper Co. officially terminated its linerboard mill that was to be built in Arkadelphia. On the other hand, companies like Highland Pellets LLC and Structurlam Mass Timber announced expansions and openings around the state.

Drs. Tian and Pelikki discussed price increases for items like softwood lumber, which was up 59% from the 2019 average. Both loggings costs and lumber production costs increased, with logging costs in Arkansas rising 6.6%. They are expected to see southern lumber production to recover this year due to sustained housing demand and strong softwood lumber markets. Due to an abundance of wood resources in the South and Arkansas, stumpage prices had a much weaker market in 2020. This is something that is expected to not see much change in 2021 due to oversupply, low prices and demand for engineered timber will see increases.

This is only a brief snapshot of the 2021 Timber Outlook for Arkansas. To see the full report, you can visit https://www.arkforests.org/page/Media.

AFA Welcomes Six New Students to the 2021-2022 Class of the Emerging Leaders Program

On February 18, the Arkansas Forestry Association (AFA) welcomed a new group of forestry professionals to the Emerging Leaders Program (ELP) during their first event of the year.

In 2017, the association started a new program designed to get new and young professionals together to experience the forestry industry’s various facets. The end goal of this two-year class is to make our participants better leaders. Each person applies to become a part of the program, and is chosen by AFA Communications Coordinator Seth Stephenson, who leads the ELP and AFA Executive Vice President Max Braswell.

“We did not think that our last group of leaders had a good opportunity to experience everything the program has to offer,” said Stephenson. “During the beginning of the pandemic last year, we went all online, but how long it was going to last. Once we realized it would not be ending anytime soon, there wasn’t much time left to finish up the program.”

By offering those students the chance to stick with the ELP for one more year, AFA is confident that they will have the opportunity to learn more about various facets of the forestry industry. Photos from a 2013 ELP tour.

The 2021-2022 class consists of six students. These students are:

- Kristine Kimbro, Arkansas Department of Agriculture
- John McMin, Arkansas Farm Bureau
- Brittain Stancil, Arkansas Department of Agriculture
- Michael Walker, Canfor Southern Pine

For their first year, things are going to be a little different. Participants will be joined by students from the 2019-2020 class for all events, which will remain online until health professionals deem it safe for everyone to meet in person.

forestry education. Students met online with AFA Director of Forestry Education Rob Beadell, who taught them about the Project Learning Tree (PLT) curriculum. Those who attended the two sessions obtained the knowledge and resources needed to lead PLT activities for varying ages and audiences. Our second event is scheduled for March, where our new class will take part in our Board and Emerging Leaders Orientation.

Jumping Oak Gall

During the late spring and summer months of 2019, Arkansans across the state reported white oaks (Quercus alba) with unsightly appearances. In 2020, homeowners in northwest Arkansas observed damage, particularly the communities in Bella Vista and the area around Beaver Lake. During an update on Monday, June 17, white oak discoloration was mapped near Beaver Lake.

Jumping oak gall was determined responsible for the condition of these trees in the northeastern and north-central counties of Arkansas. Hundreds of galls can be made on each leaf and, subsequently, leaves turn brown, curl, and may defoliate. It is not expected to kill the affected white oaks, but the extreme stress could push some trees toward death. Galls fully develop in May and drop to the ground to overwinter in the duff layer. The galls are formed by a Cymygidae larva in the genus Neuroterus, but the species is not yet confirmed by a specialist.

Emerald Ash Borer (EAB)

EAB was confirmed in Jefferson County in late-2019. No additional confirmations were made until Dec. 2020 when EAB infested trees were found in Pulaski County. Arkansas now has 25 EAB confirmed counties. Little Rock, in Pulaski County, is the most populated city in Arkansas and a Pine Bluff, in Jefferson County, is the tenth most populated city.

Ash mortality is easily observed in the South Central Plains; it is possible to spot ash killed by EAB along interstate 30 between Arkadelphia and Hope. While ARHS-PPQ are responsible for quarantining multiple agencies as well as the University of Arkansas – Monticello, assist with the detection and monitoring of EAB expansion. The Forestry Division investigated reported sightings across the state and used visual surveys.

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This map shows EAB confirmed counties throughout the state as of December, 2020. The counties highlighted in green are confirmed.

This is only a section of Barton’s 2020 forest health highlights. He continues to report on topics including the Southern Pine Beetle Prevention Program as well as a survey update on the species. That information and more can all be found in his full six-page report at: https://www.arkforests.org/page/Media.

Please Note: For meetings held at the AFA Office, please meet on the street or in one of the area lots. – do not park in the Arkansas Chamber of Commerce parking lot.

Members of AFA’s Emerging Leaders Program will receive opportunities to learn more about the various parts of the forestry industry. Photos from a 2013 ELP tour.

The 2021-2022 class consists of six students. These students are:

- Alex Davis, Green Bay Packaging
- Ty Dillion, Arkansas Department of Agriculture
- Kristine Kimbro, Arkansas Department of Agriculture
- John McMin, Arkansas Farm Bureau
- Brittain Stancil, Arkansas Department of Agriculture
- Michael Walker, Canfor Southern Pine

For their first year, things are going to be a little different. Participants will be joined by students from the 2019-2020 class for all events, which will remain online until health professionals deem it safe for everyone to meet in person.

The first event of 2021 was a lesson on forestry education. Students met online with AFA Director of Forestry Education Rob Beadell, who taught them about the Project Learning Tree (PLT) curriculum. Those who attended the two sessions obtained the knowledge and resources needed to lead PLT activities for varying ages and audiences. Our second event is scheduled for March, where our new class will take part in our Board and Emerging Leaders Orientation.

The first ELP event of 2021 had participants learning from AFA Director of Forestry Education Rob Beadell on how to prevent forestry education through the Project Learning Tree Program.

While nothing is set in stone just yet, other topics AFA hopes to educate our leaders on can include forestry economics, policy-making, and being a private landowner.

If you have any questions or would like more information about the program, you can email Seth Stephenson at sethstephenson@arkforests.org.