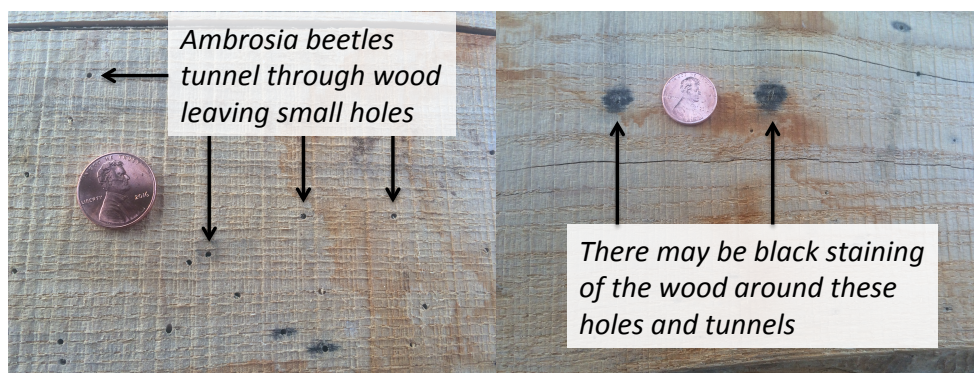
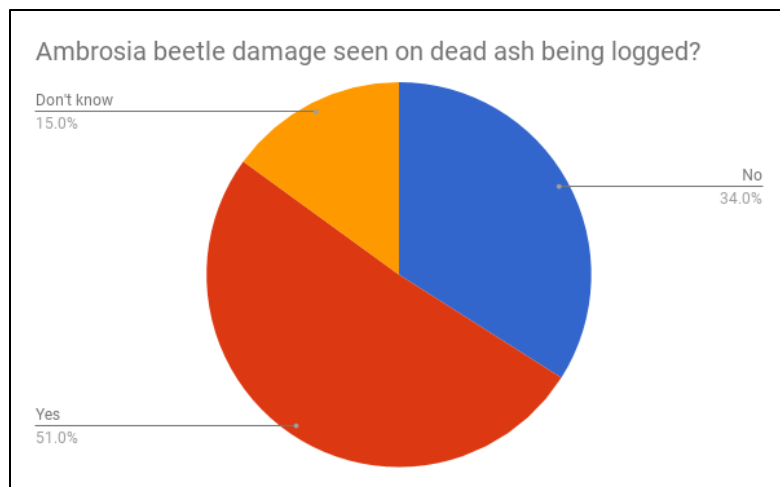


2018 White Paper on Ambrosia Beetle Damage to Dead Ash in KY: Prevalence and Economic Impact to Loggers in Northern Kentucky¹

Summary: As the emerald ash borer continues to kill ash it is important to keep in mind that dead ash can not stand for too long before being harvested or it will be damaged by ambrosia beetles. While damaged logs are still marketable and have a range of potential uses, they are worth substantially less than undamaged logs and this should be considered when planning harvests including ash in emerald ash borer affected areas.



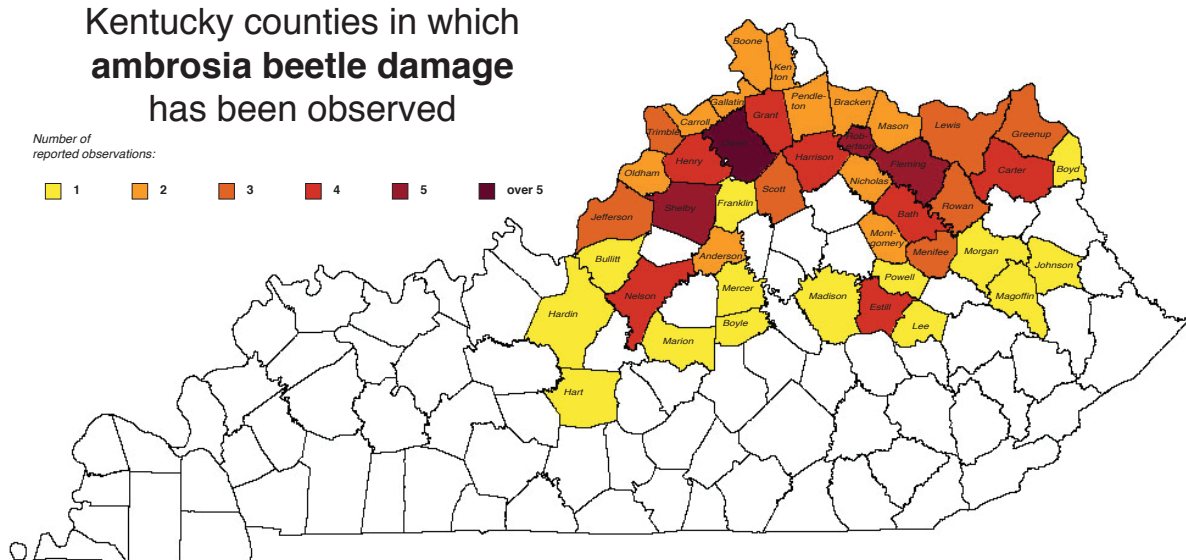
In the fall of 2017, we conducted a survey to investigate the impact of ambrosia beetle damage to dead ash being logged. Tunneling by ambrosia beetles creates many small holes in wood, which may be stained black due to a fungus. Reports prior to this survey suggested that damage was extensive in standing dead ash trees previously killed by the emerald ash borer.



To better understand this damage we sent a survey to ~800 Kentucky Master Loggers in the North Central and Northeast regions and received 80 responses back. 51% of respondents had seen ambrosia beetle damage on dead ash being logged while 34% had not and 15% did not know.

¹ This white paper was authored by Dr. Ellen Crocker, Ms. Hannah Moore, Mr. Chad Niman, and Dr. Jeff Stringer, University of Kentucky, Department of Forestry and Natural Resources. The study and analysis were developed in response to concern of Kentucky loggers about the occurrence of this insect and its potential to degrade and devalue logs. The white paper provides educational information and can inform decision-making by landowners, loggers, and the forest industry at large.

Those that had seen ambrosia beetle damage reported it in 45 counties with an average of 68% of dead ash being logged exhibiting damage. Most first noticed it in 2015 and 2016 although some individuals observed damage as early as 2010.



Survey respondents who had observed ambrosia beetle damage in ash were asked what they typically do with the damaged logs. 29% leave logs in the woods, 22% haul logs to mills, and 49% do both depending on the situation. For example, most (9) took logs to mills if the damage was minimal or if the tree was especially large. Others (7) used damaged wood as firewood or reported using wood for other personal uses such as furniture, fences, and barns (3). In addition, a few (2) reported that they would haul damaged logs to the mill depending on the market for crossties and pallets.

Results from the survey indicate that ambrosia beetle damage decreases the price per thousand metric board foot (MBF) to about 44% of ash logs that do not show signs of ambrosia beetle damage, with price per thousand MBF of undamaged logs averaging at around \$610 and damaged logs averaging close to \$270. Of the recipients who reported an economic loss due to ambrosia beetle damage, the mean estimate of total damage was \$21,067 (with a minimum of \$500 and a maximum of \$100,000).

