

Black Ash Crown Dieback in Northern Minnesota: Will Emerald Ash Borer Really Make a Difference?

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Black ash decline in northern Minnesota has been noted for several decades, but there has been little attempt to quantify its severity at the stand level, nor examine the geographic variability of stand-level decline characteristics across the region. Moreover, there is speculation about possible causes of this decline, but little direct evidence. Finally, there is uncertainty about the successional future of declining stands, particularly in light of the potential for EAB to extirpate black ash from the region. With these needs in mind, we present results of a study that quantified stand-level decline characteristics in 54 stands across northern Minnesota. In this study, we have quantified black ash decline and related its severity to site and stand characteristics, including wetland status, soil moisture conditions, stand age and diameter distributions and relationship to roads. Moreover, we quantified black ash regeneration status and successional trends in declining and healthy stands. Results from our study will be discussed in light of the potential for further loss of black ash with EAB invasion.