



OS II-05

## When do you pull the trigger? Using monitoring data to optimize EAB management

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Emerald ash borer presents a particular challenge for cities and other developed areas because resource managers and residents in those areas must manage the problem to prevent dead ash trees from becoming hazards to safety and/or property. Fortunately, management options are available for these areas. Unfortunately, there are only two of them: remove the trees or treat them with insecticides. Moreover, there is the potential for significant environmental and economic loss if these tools are not applied wisely. For instance, removing desirable trees more quickly than is needed is costly and results in the loss of the environmental services such as storm water retention. Likewise, treating trees sooner than is needed is also costly and could also have environmental impacts. Ideally, EAB population thresholds would exist that would allow cities and other entities to monitor the insects abundance and use that information to determine when trees should be treated or removed so that costs are minimized while environmental benefits are maximized. We will present results from a three year project to assess the value of EAB monitoring data for informing management under different levels of EAB population pressure. We will also compare the efficiency and efficacy of different survey methods (visual survey, branch sampling and purple prism traps) for providing useful data.

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**Science & Management of Ash Forests after Emerald Ash Borer**

Workshop on the Future of Ash Forests

July 25 – 27, 2017, Duluth, MN