

## Emerald Ash Borer Adult Dispersal

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### Objective:

This study evaluated emerald ash borer (EAB), *Agrilus planipennis* Fairmaire, adult dispersal at two Michigan sites in early summer 2003. EAB is an Asian buprestid beetle that was first discovered in Michigan and Ontario in 2002 (Haack et al. 2002).

### Methods:

At each site, several EAB-infested logs were placed at a central release point, and then uninfested, vertically positioned, sticky-banded ash trap logs were put out at specified distances and directions from each release site. The EAB-infested logs had been maintained indoors in a heated room for a few weeks to speed up development relative to wild EAB populations outdoors. Infested logs were placed in the field when adults started to emerge indoors in early May. Estimated emergence time from the test logs was at least 2 weeks ahead of the wild EAB populations. One site consisted of a power line corridor that ran through a rural area north of Ann Arbor, MI. A straight 4-km-long section of the corridor was used, which was about 100 meters wide and was generally free of trees. Trap logs were placed at 100, 250, and 500 m to the west of the release site, as well as 100, 250, 500, 1000, 1500, 2000, 2500, and 3000 m to the east of the release site.

### Results:

Only one EAB adult of an estimated 2118 released adults (based on a subsequent count of exit holes) was captured on the trap logs by late May, and this was at a distance of 250 m. The second site was the Ann Arbor airport, where trap logs were placed at distances out to 150 m to the west, 500 m to the north, 2000 m to the east, and 500 m to the south. Again, only a single EAB adult of an estimated 1059 released adults was captured on any of the trap logs by late May, and this beetle was captured at a distance of 1500 m. If repeated in 2004, marked beetles will be released and girdled ash trees will be used (with sticky traps) instead of trap logs.