



## Emerald Ash Borer and the Park Firewood Ban

### Introduction

The Emerald Ash Borer (EAB) *Agrilus planipennis* (Fairmaire) (Coleoptera: Buprestidae) is a non-native wood-boring pest of North American ash (*Fraxinus* spp.)<sup>1</sup>. This devastating pest was first found in 2002 in southeastern Michigan and adjacent areas of Windsor, Ontario, Canada. It is thought to have been introduced in the 1990's on solid wood packing material originating from Asia. As of September 2009, EAB has been discovered in 13 states (Indiana, Illinois, Kentucky, Maryland, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Virginia, West Virginia and Wisconsin) and parts of Canada.

EAB occurrences nearly surround Shenandoah National Park with the closest one being just 55 miles distant in Fairfax County Virginia.



*Emerald Ash Borer and Tree Trunk Exit Hole*

### Management Needs

This destructive beetle represents an enormous threat to North America's ash resources and forested ecosystems. Unlike many other wood boring beetles, EAB aggressively kills healthy as well as stressed trees. Larvae bore through the bark and into the cambium where they feed on the phloem. As the larvae feed they create serpentine-like galleries that disrupt the flow of nutrients, usually causing tree death after four to five years of infestation.

Although EAB is not present in Shenandoah National Park currently, it is clear that the beetle is spreading rapidly through unintentional human assistance (primarily the movement of firewood). Given the current close proximity to the park and this rapid spread, EAB poses a serious threat to Shenandoah.

The magnitude of the threat is illustrated by understanding that 4% of the park's forest is made up of white ash trees. In addition, white ash is present in 16 of the park's forest communities. Those communities make up 65% of the park's acreage (or 126,883 acres).



*Emerald Ash Borer Trap used for monitoring in the park*

### Current Procedures

Currently, there are no effective natural enemies attacking EAB in North America. If no new management strategies are developed, it is estimated this pest will likely spread to 25 states in the next 10 years, resulting in an estimated 10.0 billion dollars of economic damage (Kovacs et al. 2009). The USDA's Animal and Plant Health Inspection Service (APHIS), Forest Service (FS), and Agricultural Research Service (ARS) are working together to implement an EAB biological control program and have prepared a five year action plan to guide development of this program.

In the meantime, Shenandoah National Park has taken a proactive stance and as of March 1, 2010 a ban on bringing firewood into the park from outside sources has been put in place. Visitors may gather firewood in the park or purchase it from the park concessioner.

Extensive public information efforts have been undertaken to advise the public of this ban. Posters will be found on key bulletin boards, the 2010 edition of the *Overlook* will include an article on EAB and the ban, and the park's website contains similar information.

If visitors bring firewood with them, they will be expected to burn it immediately or put it in plastic trash bags, keep it in their vehicles, and take it out of the park.

Park staff members are working cooperatively with state officials to monitor for EAB. Large purple traps are deployed in many areas in the park and at the sites where the concessioner obtains firewood for sales.

### More Information

Additional information is available at:  
<http://www.emeraldashborer.info/index.cfm>  
<http://www.dontmovefirewood.org/>