

# Emerald Ash Borer Diagnostic Check-Off List

*Joseph F. Boggs, Daniel A. Herms, and Amy K. Stone*

A list of signs and symptoms that will be helpful in diagnosing an emerald ash borer infestation is presented here.

Emerald ash borers are a non-native insect, recently introduced to the United States. It is important to keep in mind that native ash borers are extremely common throughout the state, and the vast majority of borer-infested ash trees in Ohio are infested with native borers.

Thus far, the very few emerald ash borer infestations found in Ohio are extremely small and very localized, infesting only a handful of trees.

## Check List

### Diagnostic Signs and Symptoms Specific to Emerald Ash Borer

- ✓ Serpentine, S-shaped galleries tunneled just beneath the bark.

The galleries are etched into the underside of the bark and the outer sapwood.

Galleries are tightly packed with fine sawdust-like frass. They do not extend into the sapwood, as do those produced by the common native

clearwing or roundheaded borers that infest ash.

- ✓ D-shaped emergence holes, one-eighth inch in diameter, through the bark.

This symptom is very clear — emerald ash borer exit holes are very distinct. If there is any doubt as to whether the holes are D-shaped, then it is not emerald ash borer.

Exit holes of native borers are either round or oval, and much larger in diameter (one-quarter inch or greater).

- ✓ Legless, flattened, heavily segmented, white to cream-colored larvae (1 inch in length when mature) found beneath the bark of living trees.

Each larval segment is almost bell-shaped. The long narrow shape, flattened appearance, and distinct segmentation cause the larvae to resemble small tapeworms.

### Diagnostic Signs and Symptoms Consistent With Emerald Ash Borer, But Could Also Be Associated With Other Ash Problems

- ✓ Thinning canopy, top dieback, leading to the death of the tree within two to three years.
- ✓ Thin, relatively short (2 to 5 inches long) vertical splits through the bark of living trees.

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- ✓ Unnatural epicormic shoots sprouting from the main trunk and/or from the base of the tree.
- ✓ Unusually heavy woodpecker activity on living trees, particularly in the winter.

**Reporting Suspected  
Emerald Ash Borer Infestations**

The Ohio Department of Agriculture (ODA) should be notified if the diagnostic check-off list provides strong evidence that an emerald ash borer infestation has been found. Strong support for an emerald ash borer diagnosis means that signs and symptoms specific to emerald ash borer were observed, including D-shaped emergence holes and serpentine galleries under the bark.

An emerald ash borer diagnosis is not supported if the only signs and symptoms observed are those that can also be associated with other ash problems.

**Contact Information for the ODA**

Special Emerald Ash Borer Hotline:

1-888-OhioEAB (1-888-644-6322)

Mailing Address

Ohio Department of Agriculture  
Plant Pest Control Section  
Attn.: EAB  
8995 East Main Street  
Reynoldsburg, OH 43068

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