



# Nature's Notebook Phenophase Photo Guide

Agrilus planipennis emerald ash borer



# Why Observe?

Emerald Ash Borer (*Agrilus planipennis*) is a non-native beetle from Asia which has spread across the eastern United States since 2002. In their larval stage, the beetles destroy the heartwood of ash trees, killing them within a few years. The pest is responsible for the death of hundreds of millions of ash trees.

We forecast adult emergence based on growing degree days. Treatments are applied to control for adult beetles on infested trees, to reduce the spread of the pest. Adults lay eggs approximately 14 days after emergence, so treatment is critical in this window.



David R. McKay, USDA APHIS PPQ, Bugwood.org. CC BY 3.0

# **Tips for Identification**

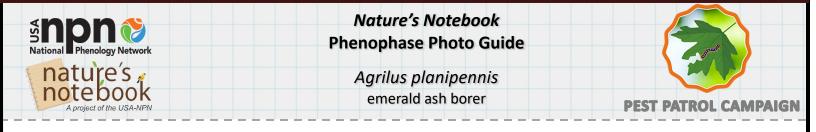
Adult beetles are metallic green and about half an inch long. They have a bright red upper abdomen when the wings are spread. Adults create a "D"-shaped exit hole in the bark.

Be aware that there is variation from individual to individual within a species, so your insect may not look exactly like the one pictured. If you are uncertain whether or not a phenophase is occurring, report a "?" for its status until it becomes clear what you are observing after subsequent visits.



Pennsylvania Department of Conservation and Natural Resources - Forestry, Bugwood.org. <u>CC BY 3.0</u>

This Phenophase Photo Guide has been vetted by the USA-NPN NCO. It is appropriate for use as a supplement to the Nature's Notebook phenophase definition sheet for this species.





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#### Adults

One or more adults are seen or heard moving about or at rest.



## Adults feeding

One or more adults are seen feeding. If possible, record the name of the species or substance being eaten or describe it in the comments field. For *Agrilus planipennis*, adults typically feed on the leaves of ash trees.



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## Mating

A male and female are seen coupled in a mating position, usually with the male on top of the female.



## Egg laying

A female is seen laying eggs on a plant. If possible, record the name of the plant or describe it in the comments field. For *Agrilus planipennis*, eggs are typically deposited in tree bark crevices.

Phenophases not pictured: Dead adults, Individuals in a net, Individuals in a trap