



KEY POINTS FOR EXTENSION STAFF: WHAT YOU SHOULD KNOW ABOUT EMERALD ASH BORER IN NEBRASKA

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Emerald ash borer (EAB) is an invasive, metallic-green beetle which has destroyed nearly 30 million ash trees in the Upper Midwest since 2002. It has moved rather rapidly westward to northern Illinois, and it will likely reach the Great Plains Region in the near future. Since it is difficult to predict exactly when it will be found in Nebraska, it is most sensible to be well-prepared to answer questions your clientele already may be asking. Hopefully, these Key Points and FAQs will enhance your command of knowledge about EAB and bring reassurance to the public that Extension is delivering timely, vital information.

KEY POINTS

- EAB is not currently known to occur in Nebraska.
- Remain current on the status and distribution of EAB in the United States.
- Learn to recognize EAB and its damage.
- Promote plant diversity in Nebraska landscapes.
- Emphasize the importance of buying firewood locally and **NOT** moving firewood.

EAB CONTROL RECOMMENDATIONS

- Make no recommendations for control of EAB, since there no current threat from this pest in Nebraska.

EMERALD ASH BORER: FREQUENTLY ASKED QUESTIONS (FAQs)

GENERAL QUESTIONS:

What is the Emerald Ash Borer (EAB)?

- EAB is an exotic, metallic green wood-boring beetle from Asia.
- It was first discovered in the US in 2002 (southeastern Michigan).
- Larvae feed beneath the bark in ash trees, and can eventually kill them.
- It has not been found in Nebraska.

Why is EAB a threat to Nebraska?

- The EAB infests and through time kills ash trees regardless of their health, size, or age.
- This pest has killed more than 30 million ash trees throughout its current range.
- EAB is a serious threat to Nebraska's 30 million ash trees. The economic impact in the city of Lincoln alone has been estimated to be more than \$137 million.
- Some communities have a high percentage of ash trees and will suffer substantial losses.

How long until EAB reaches Nebraska?

- We cannot predict when EAB will reach the state of Nebraska.
- Currently, its most western distribution is in north central Illinois.
- EAB infestations expand slowly on their own, but their range can be increased rapidly by the movement of infested ash trees or ash firewood.

If EAB reaches Nebraska, will I be able to control it on my ash trees?

- Should EAB reach Nebraska, several options will be available to homeowners for its control.
- Research conducted in Michigan, Ohio, and elsewhere suggests that satisfactory protection of ash trees can be accomplished through residual insecticide sprays applied to tree trunks and major branches, soil drenches, and insecticide injections into tree trunks.

What steps are being taken to monitor/detect EAB in Nebraska?

- Local, state, and federal agencies are involved in the detection of EAB in Nebraska.
- Awareness programs for professionals and the public will be implemented to enhance detection.
- Many important organizations, associations, professional groups, and government agencies are currently involved in educating their members and the public about EAB.

How will I know when to take action for EAB?

- State officials will notify the public when it is time to take action against EAB.

Where can I go for additional information on EAB?

- There is a wealth of information about the EAB on the internet, and one of the most important sites is at: emeraldashborer.info.
- Additional information is also available through your local Extension office, from the Department of Entomology at the University of Nebraska-Lincoln, Nebraska State Forest Service, and the Nebraska Department of Agriculture.

EAB IDENTIFICATION AND DETECTION QUESTIONS:

What does EAB look like?

- The larvae (immatures) of EAB are creamy-white, flattened and elongated, and reach a mature length of just over an inch. The area immediately behind the brown head is swollen.
- Adults (beetles) are metallic green with a long, slender body which is at most one half inch long.

Does EAB attack all kinds of ash trees?

- EAB are known to infest 16 species of ash, including white, green, blue, and black ash.
- It has not been observed infesting other kinds of trees.

How will I know if my tree has EAB?

- Early detection of EAB is very difficult.
- Metallic green adults may be observed feeding on the foliage.
- One of the first noticeable symptoms is thinning and subsequent dieback of the foliage.
- Epicormic sprouting (watersprouts, suckers) may be observed around the trunk.
- The bark may split or easily pull away, revealing dense, shallow tunnels beneath.
- Tiny D-shaped holes may be present on the trunk where adult borers have exited the tree.
- There may be an increase in woodpecker activity.

What are watersprouts/suckers?

- A common survival reaction of an ash tree to injury, disease or stress is the development of epicormic growths, or watersprouts, at the base of the tree. This is the tree's attempt to develop new growth to eventually replace the damaged trunk.
- EAB tunneling occurs beneath the bark where moisture and nutrients flow upward to the tree canopy. When tunneling damage is extensive, watersprouts develop.

How long does it take for an EAB infestation to kill a tree?

- Ash trees generally live for 2 - 4 years after initial infestation by EAB.

What other borers attack ash trees?

- Other borers which attack ash trees include the lilac-ash borer and the banded-ash clearwing. Both borers are larvae (caterpillars) of day-flying moths which resemble wasps.
- Several beetle species of round-headed borers, flat-headed borers, and bark beetles attack ash trees that are weakened or dying from some other cause. These insects do not attack healthy trees. Common borers in Nebraska include the banded ash borer, redheaded ash borer, and eastern ash bark beetle.

Are there other insects that could be confused for EAB?

- Possibly, but there are no other one-half inch long, metallic green insects in Nebraska.
- Other insects that might be confused for EAB adults include: bronze birch borer and other flatheaded borers (coppery color; not green), green tiger beetle, dogbane leaf beetle, Japanese beetle, some metallic ground beetles.

EAB MANAGEMENT QUESTIONS:

Will I be able to control EAB on my ash trees?

- Early detection of EAB is important in the management of this pest.
- There are several options to homeowners for the control of EAB.
- Satisfactory protection of ash trees has been accomplished through application of insecticides to tree trunks, major branches and foliage, or through systemic insecticides applied as soil drenches, or by injection into trunks.
- Foliar sprays to control beetles are acceptable for smaller trees.
- Trees killed by EAB should be removed and the wood destroyed before emerging beetles can move to uninfested trees.
- As time goes by, more options may become available.

What should I do if I find a beetle I think is an EAB or suspect my ash tree has an EAB infestation?

- Suspected emerald ash borers should be collected and taken to your local Extension office for positive identification.
- If you suspect your ash tree has an EAB infestation, contact your local Extension office.
- A photograph of the infested tree will help Extension staff make an accurate diagnosis.

If EAB is detected in another town in Nebraska, should I begin treating my trees?

- Treatments for EAB are not recommended until the borer has been confirmed in or near your area. An infestation in a community far away may be isolated or successfully contained.

Are there measures that can be taken to help prevent EAB from infesting my tree?

- Yes, but there is no reason to take steps to prevent infestation until after they are found in your area. Such measures, until needed, are wasteful and environmentally unsound.
- Preventive steps may include insecticide applications using various methods to protect the tree.

When should I begin spraying for EAB?

- There is no reason to initiate a control program until EAB has been detected in the state of Nebraska.

Should I cut down the ash tree in my yard?

- There is no reason to cut down your ash tree unless it is dead or dying from another cause.
- If EAB establishes in Nebraska, management steps can be taken.

Is it OK to plant another ash tree in my yard?

- Yes, but keep in mind that if EAB establishes in Nebraska, your tree(s) will be at risk of infestation.

If I don't plant another ash tree what other tree can I plant in its place?

- There are several other species of trees that do well in Nebraska.
- Consult your local Extension office for a list of alternative species.
- Visit the *Re-Tree Nebraska* website: nfs.unl.edu/retreenebraska.asp

What are the large purple traps I am seeing in ash trees?

- Several large, purple traps will be hung in tree canopies at I-80 rest areas throughout Nebraska, as well as state parks, campgrounds and large nurseries.
- The traps are coated with a sticky material and the color is attractive to EAB adults (beetles).
- Beetles landing on traps will be captured, which will aide in early detection of this pest.

I've heard you should not move firewood...why?

- On its own, EAB spreads rather slowly.
- However, humans can greatly speed up the movement of this pest by moving ash firewood from infested or quarantined areas into uninfested areas.
- Larvae (borers) can be hiding within the wood or wood products. After developing to the adult stage, beetles can fly to and can infest susceptible trees.