

# CITY OF DALLAS EMERALD ASH BORER ACTION PLAN



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*Figure 1 – provided by Texas A&M Forest Service*

## City of Dallas Emerald Ash Borer (EAB) Action Plan

### Overview

The emerald ash borer (*Agrilus planipennis*) is a destructive non-native wood-boring pest of ash trees (*Fraxinus* spp.). Native to Asia, the emerald ash borer beetle (EAB) was unknown in North America until its discovery in southeast Michigan in 2002. All native ash species are susceptible to attack. Ash trees with low population densities of EAB often have few or no external symptoms of infestation. EAB is a significant threat to urban, suburban, and rural forests as it kills both stressed and healthy ash trees. EAB is very aggressive, and ash trees may die within two or three years after they become infested.



Figure 2 - USDA Forest Service image gallery

## **Purpose**

The City of Dallas Emerald Ash Borer Action Plan has been developed to provide a citywide coordinated response and to help the city and citizens plan to respond to the potential adverse effects of EAB. The primary goal of the Plan is to provide guidance prior to and when EAB is found in the City of Dallas; through effective communication with the citizens of Dallas; and to mitigate impacts.

The Emerald Ash Borer Action Plan is a living document which will be reviewed and updated as new data and research comes to light.

**Forestry Technical Team** serves as the lead group in advising City executives, in planning, and coordinating all forestry and EAB activities.

- Technical readiness – Ensure that policy decisions, actions, and education initiatives are guided by the best and most current science.
- Administrative Readiness - Ensure that current, relevant, and achievable policies are in place that allows the actions described in this plan to occur quickly and unencumbered.
  1. Maintain the EAB Action Plan.
  2. Identify resources and needs.

**Communications Team** supports activities of the Technical Team by communicating accurate information quickly and broadly in a manner that increases the effectiveness of strategic efforts to prevent and control EAB infestations.

- Media campaign for City of Dallas Forestry, including EAB education.
- Educate the public and media to ensure accuracy of information.
- Develop, plan, and strategize for both pre- and post-infestation

## **Pre-Infestation Strategy**

### Goal:

To decrease the impact on overall forest canopy by educating the public, increasing populations of other native tree species, and by reducing the overall ash tree population.

Being a keystone species, ash trees benefit people, wildlife, and the environment as a habitat for bats, and woodpeckers, owls, and multiple other nesting birds with nesting holes and structure, as well as a supply of seeds for a multitude of species of wildlife.

Ash woodlands, as the City of Dallas has distributed in parts of the Great Trinity Forest, support a rich and diverse ground flora. Shed ash leaves retain more nutrients and are recycled more rapidly than those of most other trees. They improve soils by raising the pH and by increasing nutrient availability. Thus, they greatly influence decomposer, mycorrhizal (fungi) and soil communities.

Complete removal or loss of the ash tree population has the potential for an extinction cascade. Studies indicate that there are 98 species of ash-dependent specialist invertebrate herbivores, including nine species of hawk moth.

We are working towards ash tree conservation as part of an integrated approach to managing the emerald ash borer, including possible treatments for significant trees. Treatments may be both injections and soil drenches. Per our partner agencies no treatment is recommended until the beetle is found within 20 miles of a confirmed site.

### **Monitoring:**

- Worked with the Texas A&M Forest Service (TFS) to increase EAB monitoring/trapping efforts in and around Dallas. Completed April 2021.
- May 2021: City staff attended EAB monitoring session with TFS staff in Fort Worth to see on the ground impacts of EAB
- TFS will contact the team immediately if any EAB are found in Dallas County traps.

## **Inventory:**

- Forestry Technical Team began reviewing available historical data, and other material from outside organizations, to determine what level of a tree inventory would produce the most beneficial data.
- Ash tree inventory of select Park properties from available 2014 park tree surveys was completed to determine if there was any change in the ash population. This comparison found a decline in population except within riparian areas.
- Tree Keeper online software training started in late July 2021. This software was identified as an effective and efficient means to inventory trees in the City of Dallas. Multiple attributes can be used, such as but not limited to location, species, size, and condition of the trees. Training started in late July 2021.
- Updates to inventory, ash tree removals and new plantings
  - Park and Recreation, City Forester, and Certified Arborists-Park lands were assessed focusing on riparian areas using the results of a 2014 Park tree inventory finding that ash tree counts increased in these areas. Public Works, Medians, and publicly owned ROW
  - Water Utilities, City Forester, and Community Foresters - Assist Public Works, Creeks, Floodway Management areas and Branch Out Dallas tree locations

## **Tree plantings**

- Ash trees have not been included in public property plantings since 2014.
- Identify areas of large, concentrated ash populations - comprehensive planning of removals and plantings to replace with other native species
- Use media campaign, education, and trees for private property programs such as Branch Out Dallas to increase non-ash tree populations and overall canopy cover

## **Outreach:**

- Developed talking points for public outreach efforts and media to centralize messaging across all departments.
- June 2021 – The team launched the Urban Forestry website with various outreach information and event listings.
- Began producing EAB related videos to be posted on the website.

- Continue to integrate volunteer groups into both the outreach and data collection efforts.
- Develop and initiate a media/marketing campaign.

### **Response to Detection**

Goal:

Manage the population and spread of EAB.

The Forestry Technical Team, along with local, state, and federal partners, and agencies will implement coordinated efforts to contain the infestation according to current national policies and scientific information.

- Work with Federal, State, and local agencies in mitigation efforts.
- Quarantine – publicize laws, regulations, or COD policies.
  - ✓ Plan and implement containment actions.
    - Issuance of Emergency Quarantine by Texas Department of Agriculture (TDA)
      - The quarantine includes, but not limited to, the movement of untreated ash, woody debris or lumber, mulch of all hardwood species and firewood of all hardwood species to areas outside of quarantine areas
      - TDA approved mitigation and treatment measures.
  - ✓ Schedule an emergency meeting with cooperators (State, municipal, tree services utility companies, recreational areas, and other).
  - ✓ Survey
    - Organize and conduct a delimiting survey to determine the infestation boundaries. (Technical Team, TFS and USDA APHIS – Plant Protection and Quarantine).
    - Conduct an assessment of ash trees throughout the City to determine the conditions and preservation strategies for significant ash trees that are 24" in diameter and larger in good condition, or where there is a stand of good condition ash and remove those ash trees which pose a public safety issue. Further, the State has implemented a quarantine for Dallas County and no untreated wood, wood debris or firewood can be moved

outside the quarantined area(s). Dallas County joins Parker, Tarrant, and Denton Counties in quarantine. Acceptable wood treatments can be found on the Texas Department of Agriculture website.

- ✓ Initiate City code, policies, regulatory and control activities as necessary.
  - ✓ Determine if removal of potential host trees is appropriate.
  - ✓ Develop compliance agreements with stakeholders to restrict movement from EAB-infested (regulated) areas.
- Complete public land tree inventory
    - ✓ Determine total number of ash population.
    - ✓ Track number of ash trees removed or treated
  - Develop systematic tree removal process – Ash trees killed by EAB requires active management response, as they are known to become structurally compromised quickly after death. Risk of part or whole tree failure increases exponentially thus posing a public safety issue and removal should be completed as quickly as possible.
  - Budgeting
    - ✓ Staffing
    - ✓ Development of ash and woody debris program
  - Continue working with Texas A&M Forest Service in monitoring beetle populations and locations
  - Continue ash removals due to damage, age and condition
  - Develop removal and replanting plans for high ash concentration areas
  - Monitor ongoing research into EAB resistant ash cultivars

The Communications Team - communicates response information.

- ✓ Release accurate information to the media.
- ✓ Provide accurate information and updates to the media through the core members of the Communication Team.
- ✓ Provide accurate information to affected residents.
  - Prepare information for customizing and distributing to affected area/neighborhood(s) immediately after infestation is found.

- Host resident/landowner meetings to share information as soon as possible after finding an infestation.
- ✓ Communicate with public and industry professionals to foster cooperation and maximize effective response.

## **Federal and State Agencies**

### **USDA Animal and Plant Health Inspection Service (APHIS)**

- Allocation of resources to activities for long-term benefit to slowing the spread of EAB or helping affected communities recover from EAB infestation
- Development and deployment of EAB biological control organisms
- Research into integrated pest management of EAB that can be used at the local level to help safeguard an ash population of significant importance to a community
- Research, in tandem with the U.S. Department of Agriculture (USDA) Forest Service and other Federal agencies, into the phenomenon of “lingering ash,” or ash trees that are still alive and present in the landscape in areas of otherwise heavy infestation
- Integration of findings of research

<https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-and-disease-programs/pests-and-diseases/emerald-ash-borer>

### **Texas Department of Agriculture (TDA)**

- Establishes, maintains, and regulates quarantines  
Title 4, Chapter 19, Subchapter Z, Emerald Ash Borer (EAB) Quarantine, (§§ 19.700 - 19.703)
  - § 19.700 Quarantined Pest
  - § 19.701 Quarantined Areas
  - § 19.702 Quarantined Articles
  - § 19.703 Restrictions
- Assist in all response activities including quarantine, evaluation, identification, disposal, disinfection, epidemiology, trace-backs and trace-



forwards, permitting, inspection, transportation control systems, and survey activities.

- Cooperate in the declaration of the emergency area and assist in defining the emergency area and control or quarantined zones.
- Provide investigations and support in cases of regulatory violations.
- Consult with State and local authorities regarding response operations.
- Provide Regulatory Treatments

[https://www.texasagriculture.gov/Portals/0/images/ACP/EmeraldAshBorer/EAB\\_Treatments\\_Measures.pdf](https://www.texasagriculture.gov/Portals/0/images/ACP/EmeraldAshBorer/EAB_Treatments_Measures.pdf)

- Guidelines for Complying with Emerald Ash Borer (EAB) State and Federal Quarantine Regulations

[https://www.tnlaonline.org/uploads/7/7/5/3/77532106/guidelines\\_for\\_complying\\_with\\_emerald\\_ash\\_borer\\_quarantine.pdf](https://www.tnlaonline.org/uploads/7/7/5/3/77532106/guidelines_for_complying_with_emerald_ash_borer_quarantine.pdf)

### **Texas A&M Forest Service**

- Collect, collate, analyze, and disseminate technical and logistical information and distribute to field staff and cooperators.
- Assist in all response activities including quarantine, evaluation, identification, disposal, disinfection, and epidemiology.
- Assist partners and communities on media, public notices, and communication
- Provide training for partners, communities or support agencies involved in response operations. Training may consist of general information, survey, sampling, diagnostic, and regulatory procedures.

## **Appendix A**

### **City of Dallas Forestry Task Force and Partners**

- USACE, Lewisville Aquatic Ecosystem Research Facility
- International Society of Arboriculture, Texas Chapter
- Texas A&M Texas Forest Service
- Texas Department of Agriculture (TDA)
- Open Space System - County
- Texas Parks and Wildlife Department (TPWD)
- Dallas Fire & Rescue

## APPENDIX B

### Frequently Asked Questions

#### **How big a problem is EAB?**

EAB is now considered the most destructive forest pest ever seen in North America. The scope of this problem will reach the billions of dollars nationwide if not dealt with appropriately. State and federal agencies have made this problem a priority. Homeowners can also help by carefully monitoring their ash trees for signs and symptoms of EAB throughout the year.

#### **Where did the EAB come from?**

The natural range of EAB is eastern Russia, northern China, Japan, and Korea. Before June of 2002, it had never been found in North America.

#### **How did it get here?**

We don't know for sure, but it most likely came in ash wood used for stabilizing cargo in ships or for packing or crating heavy consumer products.

#### **What types of trees does EAB attack?**

All species of ash trees in our area are affected. They may be found in all landscaped or natural areas, or the Great Trinity Forest.

#### **What happens to infested ash trees?**

The canopy of infested trees begins to thin above infested portions of the trunk and major branches because the borer destroys the water- and nutrient- conducting tissues under the bark. Heavily infested trees exhibit canopy die-back usually starting at the top of the tree. One-third to one-half of the branches may die in one year. Most of the canopy will be dead within two years of symptoms first appearing.

Sometimes ash trees push out sprouts from the trunk after the upper portions of the tree dies. Although difficult to see, adult beetles leave a 1/8-inch diameter, "D"-shaped exit hole in the bark, when they emerge.

#### **What does EAB look like?**

The adult beetle is dark metallic green, and measures 1/2 inch long and 1/8 inch wide.

**How is this pest spread, once established?**

We know EAB adults can fly at least 1/2 mile from the tree where they emerge. Many infestations, however, were started when people moved infested ash nursery trees, logs, or firewood into uninfested areas. Shipments of ash nursery trees and ash logs with bark are now regulated, and transporting firewood outside of the quarantined areas is illegal, but transport of infested firewood remains a problem. **PLEASE** - do not move any ash firewood or logs outside of the quarantined area.

**Does it only attack dying or stressed trees?**

No, healthy ash trees are also susceptible, although beetles may prefer to lay eggs or feed on stressed trees. When EAB populations are high, small trees may die within 1-2 years of becoming infested and large trees can be killed in 3-4 years.

**What should I do if I have ash trees on my property?**

There are no simple answers to this question. Much will depend on the condition of your trees, your objectives for the property, and the status of EAB in your area.

You will need to explore your options with a professional forester or certified arborist and stay current on EAB regulations that affect your area. You can find a certified arborist at [www.treesaregood.org](http://www.treesaregood.org)

**Can I save my ash tree from being infested by EAB?**

Perhaps, however, insecticide treatments can be costly, and other options should be considered prior to treating your tree. Also, age and condition should be taken into consideration.

You will need to explore your options with a professional forester or certified arborist and stay current on EAB regulations that affect your area. You can find a certified arborist at [www.treesaregood.org](http://www.treesaregood.org)