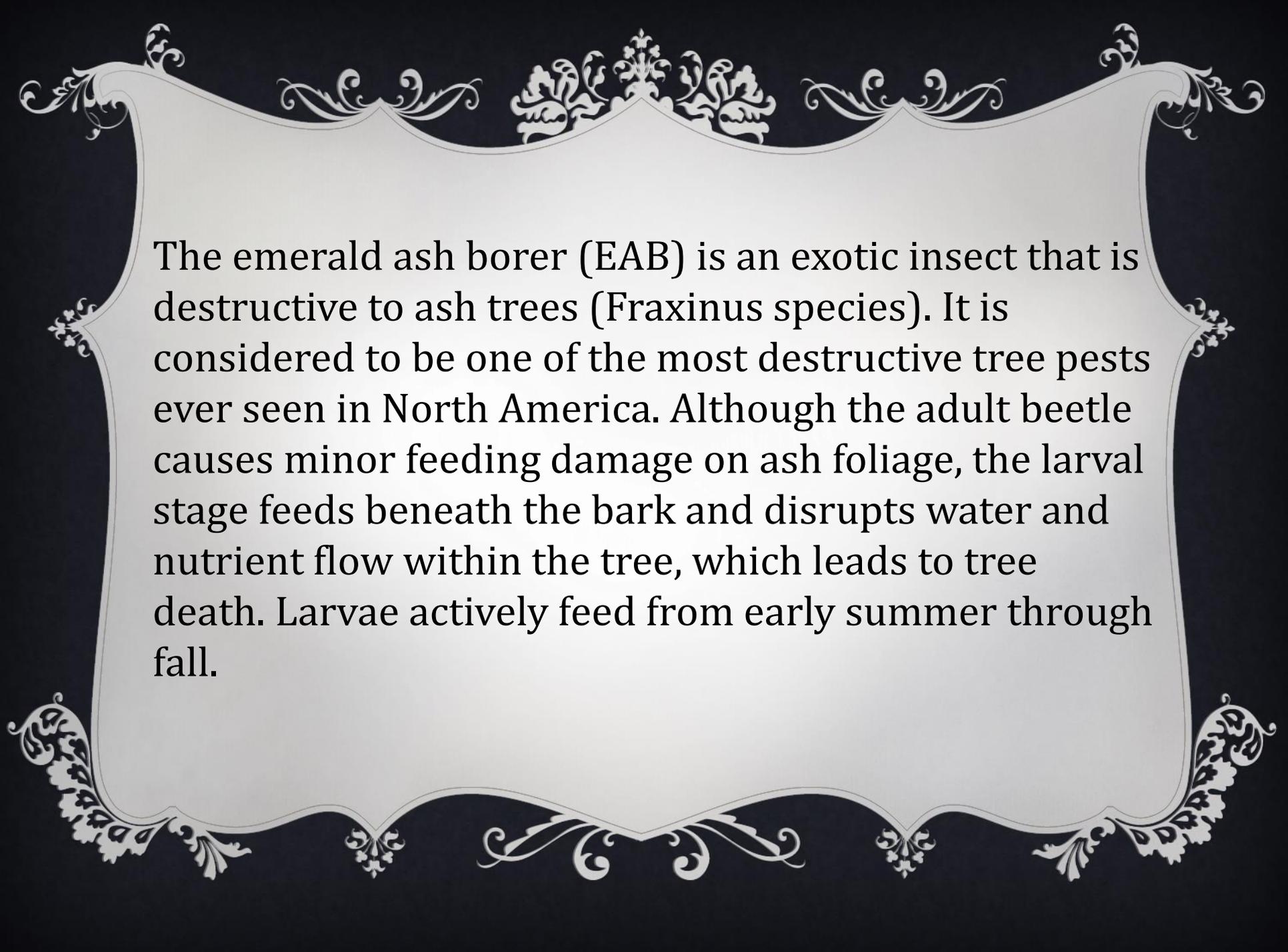


EMERALD ASH BORER MANAGEMENT

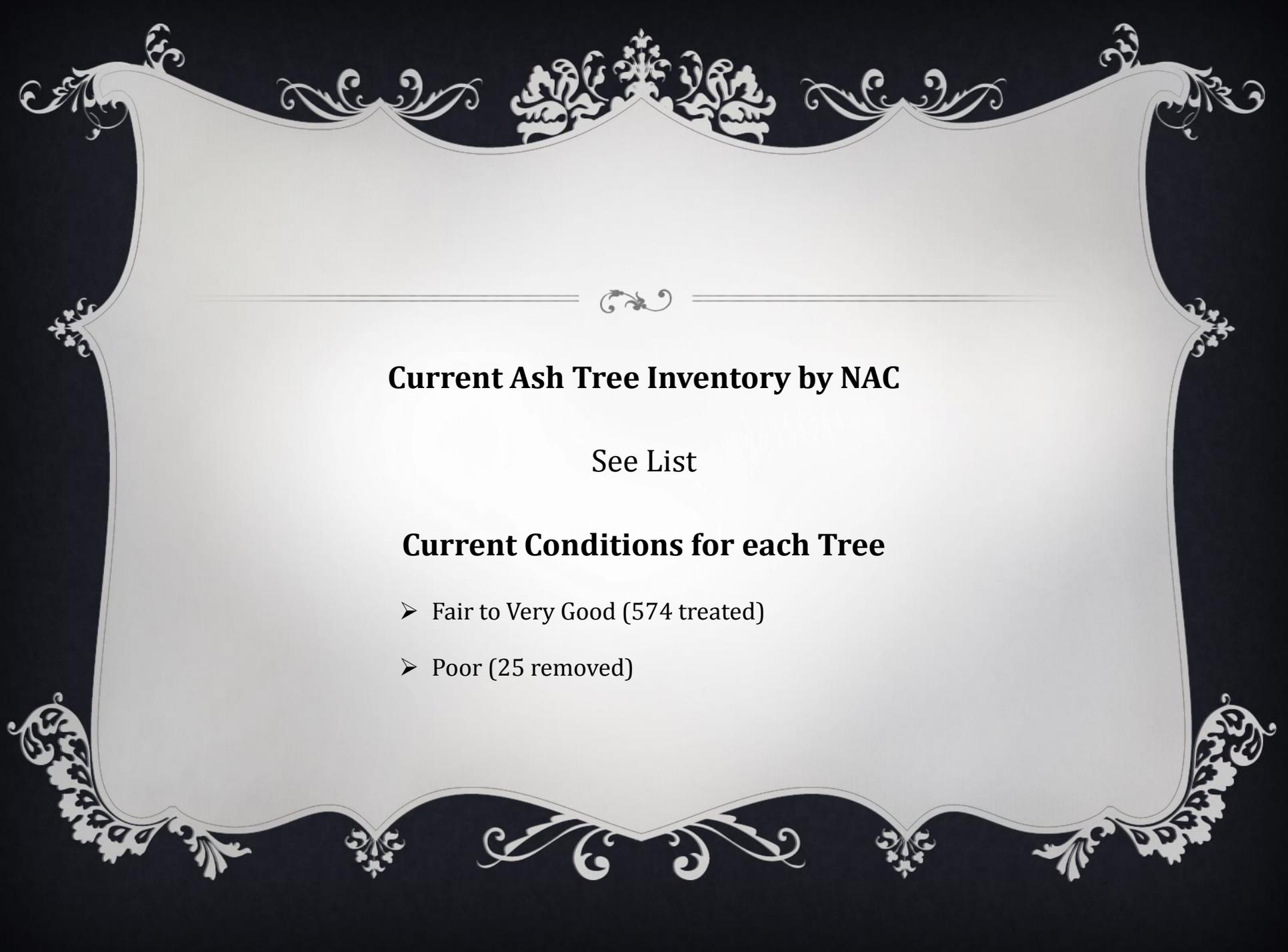
Parks and Recreation Department

07-29-2015





The emerald ash borer (EAB) is an exotic insect that is destructive to ash trees (*Fraxinus* species). It is considered to be one of the most destructive tree pests ever seen in North America. Although the adult beetle causes minor feeding damage on ash foliage, the larval stage feeds beneath the bark and disrupts water and nutrient flow within the tree, which leads to tree death. Larvae actively feed from early summer through fall.



Current Ash Tree Inventory by NAC

See List

Current Conditions for each Tree

- Fair to Very Good (574 treated)
- Poor (25 removed)

WHEN SHOULD WE THINK TREATMENT?

Management Options

- 1. Low Risk Preventative – High value trees with positive ID treated within 15-25 miles*
- 2. High Risk Preventative – trees of value should be considered within 15 miles*
- 3. Removal and Replacement*

A decorative white floral border with intricate scrollwork and leaf patterns surrounds the central text. The border is set against a dark background.

APPLICATION METHODS

- 1. Trunk Injections – \$5.60 per DBH bi-annual*
- 2. Soil Drenching – \$1.10 per DBH annual*
- 3. Soil Injections - \$1.10 per DBH annual*
- 4. Bark Spray – \$2.25 per DBH annual*

A decorative white floral border with intricate scrollwork and leaf patterns surrounds the central text. The border is symmetrical and frames the entire content.

BUDGET SUMMARY

\$15,000 has been requested to treat our current street tree and park inventory for 2016

587 street trees at an average of 10" per tree

Option 1	\$16,800 per yr.
Option 2&3	\$6,600 per yr.
Option 4	\$13,500 per yr.

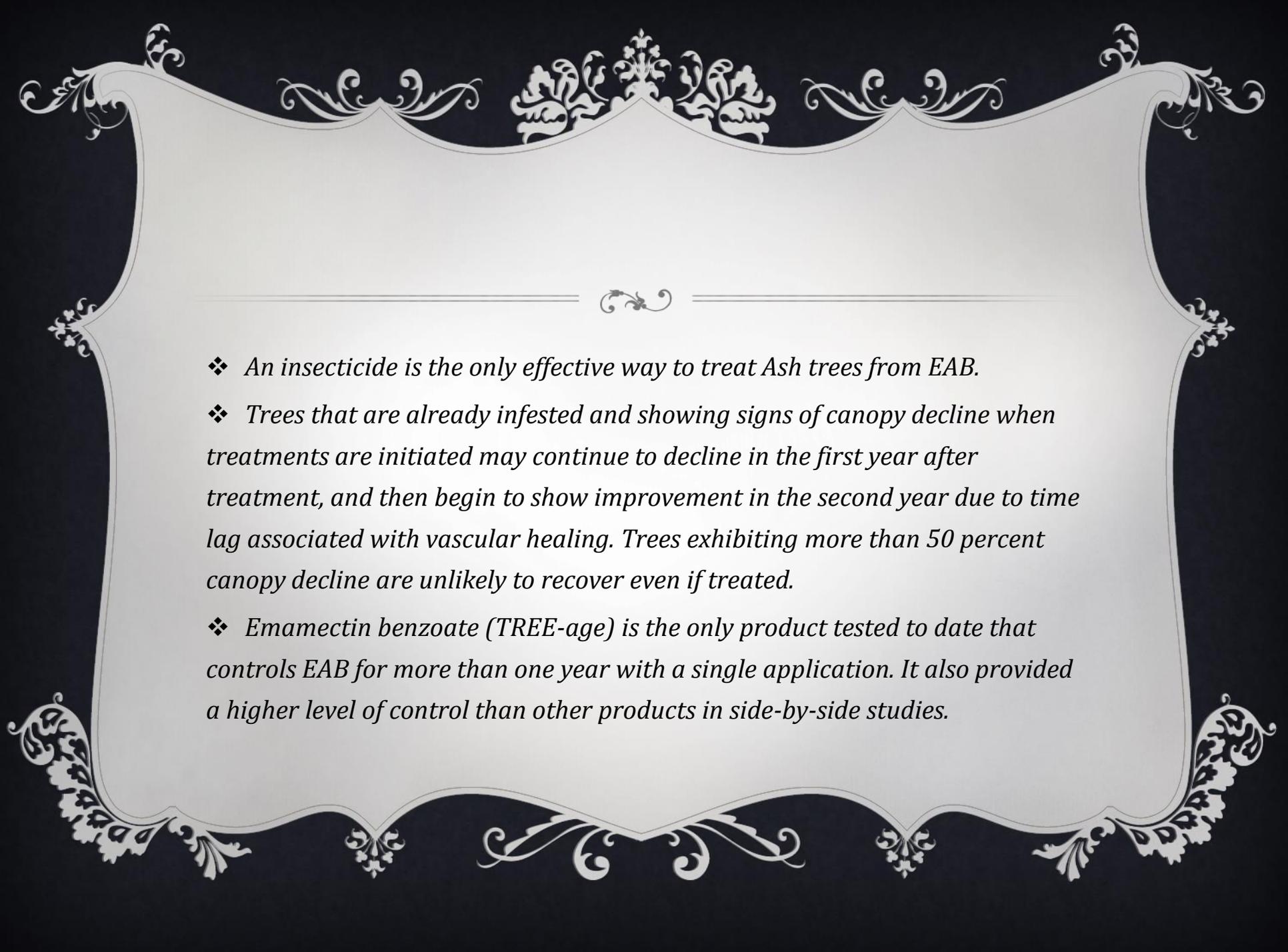
152 park trees @ an average of 16" per tree

Option 1	\$7,000 per yr.
Option 2&3	\$2,700 per yr.
Option 4	\$5,500 per yr.

A decorative white floral border with intricate scrollwork and leaf patterns surrounds the central text. The border is symmetrical and frames the content against a dark background.

KEY POINTS AND SUMMARY

- ❖ *Current soil drenching and injections prices are at the low treatment rate. Higher rates could increase by 50%*
- ❖ *Our street tree Ash inventory 6.15% of total*
- ❖ *Our total park tree inventory 1 Ash trees per 3 acre*
- ❖ *Impact on city parks losing Ash trees is very low due to diversity and small inventory. Ash trees in pockets will show less density*
- ❖ *Treatments may need to continue for 15 years without knowing the results*

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- ❖ *An insecticide is the only effective way to treat Ash trees from EAB.*
 - ❖ *Trees that are already infested and showing signs of canopy decline when treatments are initiated may continue to decline in the first year after treatment, and then begin to show improvement in the second year due to time lag associated with vascular healing. Trees exhibiting more than 50 percent canopy decline are unlikely to recover even if treated.*
 - ❖ *Emamectin benzoate (TREE-age) is the only product tested to date that controls EAB for more than one year with a single application. It also provided a higher level of control than other products in side-by-side studies.*

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- ❖ *One disadvantage of trunk injections is the potential for injury to the tree, especially if treatments are applied every year.*
 - ❖ *Soil drenches and injections are most effective when made at the base of the trunk. Imidacloprid applications made in the spring or the fall (2x rate) have been shown to be effective.*
 - ❖ *Soil injections should be no more than 2-4 inches deep, to avoid placing the insecticide beneath feeder roots.*
 - ❖ *To facilitate uptake, systemic trunk and soil insecticides should be applied when the soil is moist but not saturated or excessively dry.*
 - ❖ *Imidacloprid soil treatments are labeled for application at a higher maximum rate than other Imidacloprid formulations, and recommend that trees larger than 15-inch DBH be treated using the highest labeled rate.*

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- ❖ *Research and experience suggest that effectiveness of insecticides has been less consistent on larger trees.*
- ❖ *Treatment programs must comply with any label restrictions on the amount of insecticide that can be applied per acre in a given year*
- ❖ *Be aware of the status of EAB in your location. Current maps of known EAB populations can be found at www.emeraldashborer.info.*