Management Options for EAB

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Forest Health Watershed Planner
Forest Health and Your Private Woodland
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<table>
<thead>
<tr>
<th>Active Ingredient</th>
<th>Examples of product</th>
<th>Frequency</th>
<th>Application Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emamectin benzoate</td>
<td>Tree age, Arbormectin</td>
<td>Every 2-3 years</td>
<td>Trunk injection</td>
</tr>
<tr>
<td>Azadirachtin</td>
<td>Treeazin</td>
<td>Every 1-2 years</td>
<td>Trunk injection</td>
</tr>
<tr>
<td>Dinotefuran</td>
<td>Safari, Transect, etc.</td>
<td>Annually</td>
<td>Bark spray, soil drench, soil injection</td>
</tr>
<tr>
<td>Imidaclorprid</td>
<td>Xytecl, Imajet, etc.</td>
<td>Annually</td>
<td>Trunk injection, soil drench, soil injection</td>
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</tbody>
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Emamectin Benzoate

- Common brand name: Tree-Age
- Effective for 2+ years
- Conducted by licensed pesticide applicator
- Costs about $10/diameter inch
- Treat in early-mid Spring
Selecting trees for treatment

**Developed areas:**
- Within 10-15 miles of infestation
- <30% dieback
- Good condition
- Large
- Important value

Tyler Wakefield, MD DNR Forest Service
Selecting trees for treatment

Natural areas:
- Clusters of male and female trees
- Within 10-15 miles of infestation
- <30% dieback
- Good condition
- Large/dominant trees
- Ecosystem value
***Restrictions near water
MDNHP plots containing ash (Fraxinus spp.)

**Rare Species**
- Black
- Pumpkin
- Carolina ash
Removals

- Ash snap
- Focus on potential safety hazards, not every tree in the forest
- Remove infested trees early to avoid higher costs and safety hazards

Aaron Cook, MD DNR Forest Service
• Diversify tree species
• Underplant, especially in riparian areas
• Control invasive plants

Howard County parks. Photo taken by Tyler Wakefield, MD DNR Forest Service.
Silviculture

- Reduce ash component in the forest
  - Harvest may be an option
  - Leave some ash (5-10%)
- Diversify the stand
  - Encourage growth/regeneration of other species
- Maintain riparian buffers
- Talk to your local forester to assess your options
Biocontrol

- Carried out by state agencies on public land
- 4 species of parasitoid wasps approved for release
- Our best long term management strategy, but we don’t have enough wasps in the landscape yet.
- IPM approach combining treatment and biocontrol
Most importantly...

Spread the word, not the bug!

- Talk to your friends, neighbors, or local governments
- Don’t move firewood and other ash products
Questions?

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