## Town of Cape Elizabeth - Public Works Department - Community Forestry

Trees along our roadways, public lands and town forests are important environmental assets for Cape Elizabeth. Our goal is to keep our trees and forest healthy by sharing important information to the public.

### **Summary for Cape Elizabeth:**

- Winter Moth activity seems light this year, only two reports provided to the Town.
- Hemlock Wooly Adelgid continues to affect Hemlock trees in all areas.
- Emerald Ash Borer has been found in Cape Elizabeth and is expected to further impact and decline Ash trees area wide.
- We encourage the public to report any sightings to the Town to assist in ongoing monitoring. Please send information to <a href="mailto:tree.warden@capeelizabeth.org">tree.warden@capeelizabeth.org</a>.



**Tree Alerts – Active Cape Elizabeth tree and forest alerts:** 

#### **Invasive insect threats:**

**Winter Moth -** The Town of Cape Elizabeth and its residents have waged a multi-year battle against Winter Moth. November reports in Cape Elizabeth have been sporadic and light. Tree banding, treatments and biocontrols hopefully reduced this pest as it has in other outbreak areas of Cape Cod and Nova Scotia. For more information see web Maine Forest Service web link:

Winter Moth: Forest Health & Monitoring: Maine Forest Service: Maine DACF

**Hemlock Wooly Adelgid (HWA)** – Our native Eastern Hemlock is under serious threat both in residential neighborhood landscape setting and our town woodlands. Recommendations include inspecting Hemlock trees for white cottony adelgids under the needles, this pest can be treated by commercial arboriculture firms and biocontrol options are available with advanced notice.

Hemlock Woolly Adelgid Overview: Forest Health & Monitoring: Maine Forest Service: Maine DACF

**Emerald Ash Borer (EAB)** – Emerald Ash Borer is another serious invasive insect threat that only affects Ash trees. EAB has been found in Cape Elizabeth in 2023. Best to consider preventative treatments to healthy heritage size trees or those important to home landscapes soon. As with HWA, this pest can be treated by commercial arborists, though the long-term success is unknown. Review these helpful EAB web links from the Maine Forest Service:

Emerald Ash Borer (EAB) Updates: Forest Health & Monitoring: Maine Forest Service: Maine Agriculture, Conservation, Forestry (DACF)

Ash Treatment Guide (maine.gov)

<u>List of Licensed Pesticide Applicators Willing to Treat Browntail Moth and/or Hemlock Woolly Adelgid:</u>
Browntail Moth (Euproctis chrysorrhoea): Forest Health & Monitoring: Bureau of Forestry: Maine DACF

**Beech Leaf Disease (BLD) -** Beech Leaf Disease has been found in mid-coast Maine and greater Portland. At this time, it is on the watch here in Cape Elizabeth. It affects both native American Beech and nonnative European Beech trees. See info link and report sightings:

Beech Leaf Disease: Forest Health & Monitoring: Bureau of Forestry: Maine DACF

### **Maine Forest Service – Forest Health & Monitoring Information:**



## Winter Moth



#### What?

A hardwood defoliator from Europe

When (Detection/Likely Arrival)?

2011/late 2000s

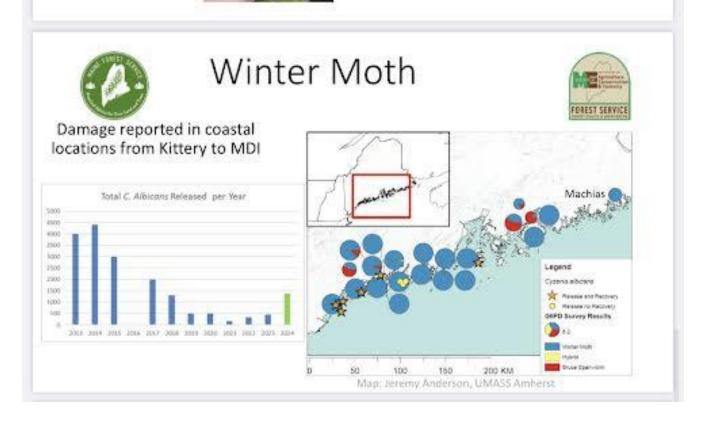
Where?

Coastal Maine



#### How to respond?

Natural enemy friendly landscapes Pesticide treatment of high-value ornamental/street trees Introduce biological control Bare root plant sales Share information





# Hemlock Woolly Adelgid



#### What?

A sucking pest of hemlock

## When (Detection/Likely Arrival)?

NA: 1950s/mid-40s); ME: 2003/late 90's

#### Where?

ME: Coastal Counties except Washington; Kennebec Co.

How to respond?

Manage hemlock (forest)

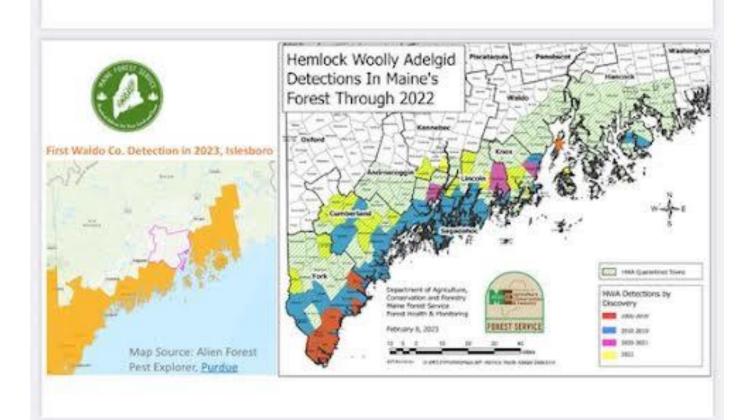
Monitor for detection

Consider alternative landscaping

Introduce biological control

Follow low risk practices

- Aug-Feb least risk of spreading pest during management activities
- Don't move rooted hemlock to uninfested areas





## Emerald Ash Borer



#### What?

A small, metallic green beetle from Asia, attacks ash trees leading to decline and death

## When (Detection/Likely Arrival)?

NA: 2002 (mid-90s); ME: 2018 (mid

20-teens)

#### Where?

ME: York, Oxford, Cumberland, Androscoggin, Kennebec, Penobscot, Aroostook Counties.

### How to respond?

Monitor ash Manage ash Collect seeds



Follow Best Management Practices Introduce biological control

#### Adapted from K. Coluzzi MeDACF



## Quarantine

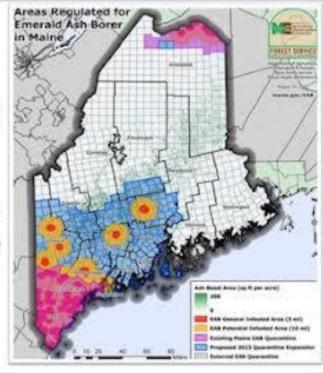
The <u>emerald ash borer</u>; <u>firewood of all hardwood species</u>; trees and parts of trees in the <u>genus Fraxinus</u> (including logs, stumps, roots, branches) CAN BE MOVED <u>ONLY</u>:

Within quarantined areas – movement of a regulated article solely within the quarantined area of the state is allowed without restriction.

Out of a quarantined area with a certificate, or permit, or compliance agreement (through DACF)

Out of a quarantined area without a certificate – only by a DACF official for experimental or scientific purposes.

Don't Mistake Quarantine for Best Practice!



# EAB - life cycle



1 From May to September, beetles mate and the female lays 60-90 eggs, one at a time, in crevices all over the bark of healthy ash trees.

Eggs



1/25 of an inch long

Eggs hatch as larvae, which tunnel through bark and into tree's cambial tissue. In winter, the larvae zig zag while feeding on cambial tissue that disrupts the tree's vascular tissue, eventually killing the tree.

Larvae



Mature larvae are about an inch long

When warmer weather arrives (usually in April), larvae enter the pupal stage. They transform from larvae into sexually mature adults.

Pupae



②In mid to late May, the pupae turn into beetles and emerge through holes the larva left in the bark.



Adult beetles are 1/3 to 1/2 inches long



Cambial tissue: The transportation system that takes water, minerals, and nutrients throughout the tree.

The cycle begins again as male and females feed on leaves at the top of trees and begin mating and laying eggs for three to four weeks before dying.





Graphic Credit: Tim Summers / The Detroit News