Monitoring for Emerald Ash Borer

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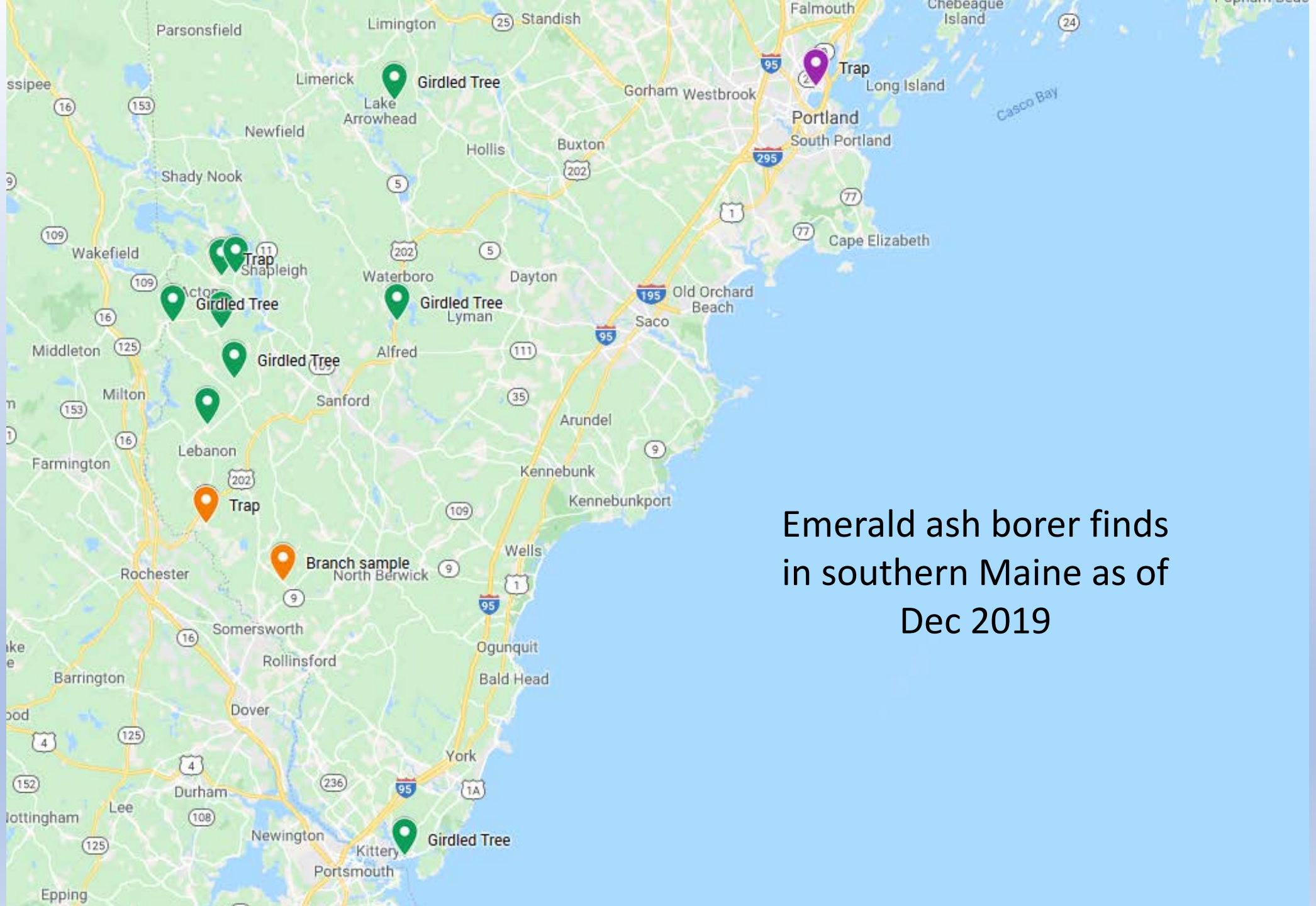


Emerald ash borer finds in southern Maine as of Dec 2019

Biosurveillance

Cerceris fumipennis

Family: Crabronidae
(hunting wasps)

-Native wasp

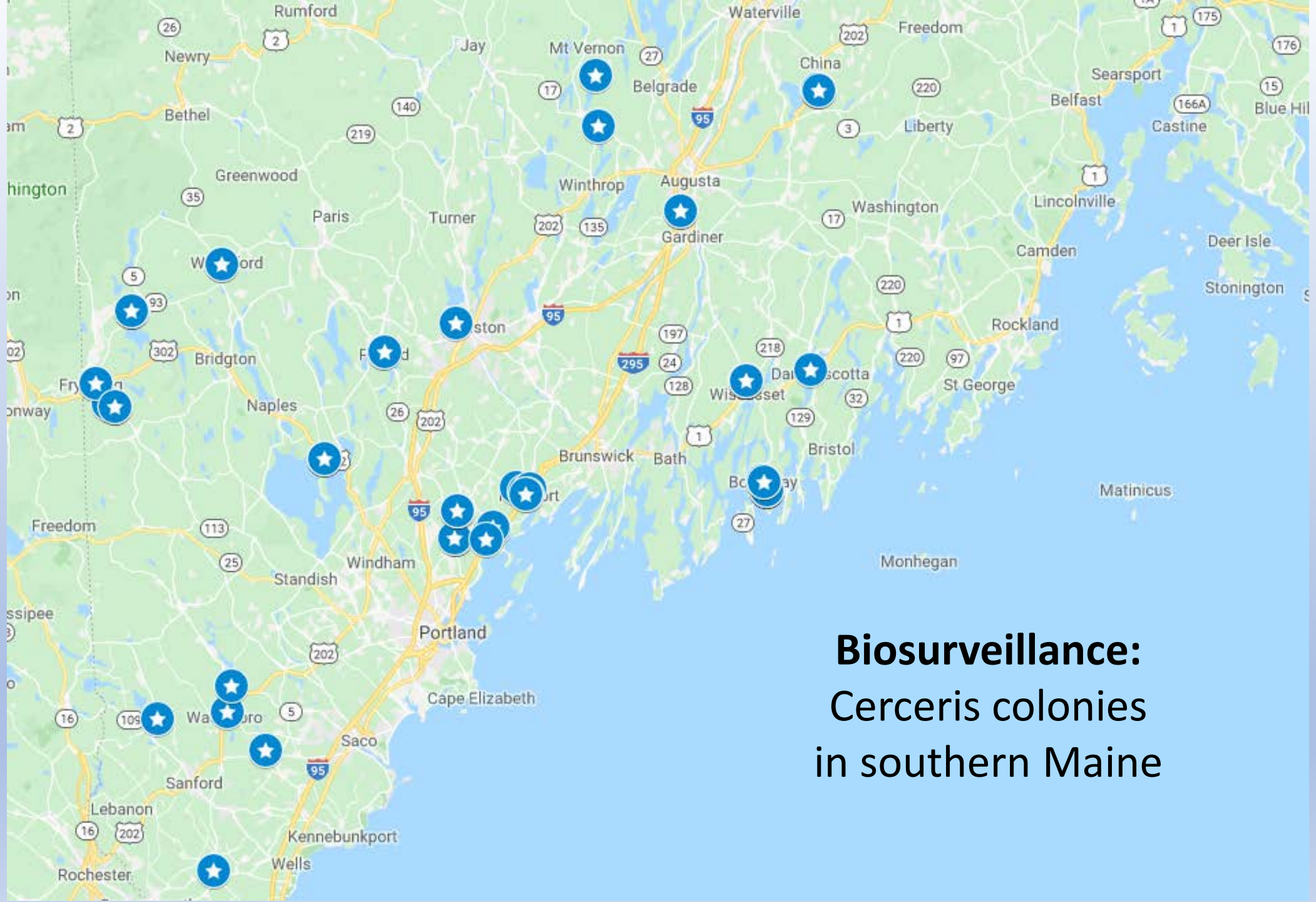
-Solitary ground-nester (in colonies) often in baseball diamonds

-**Non-stinging**

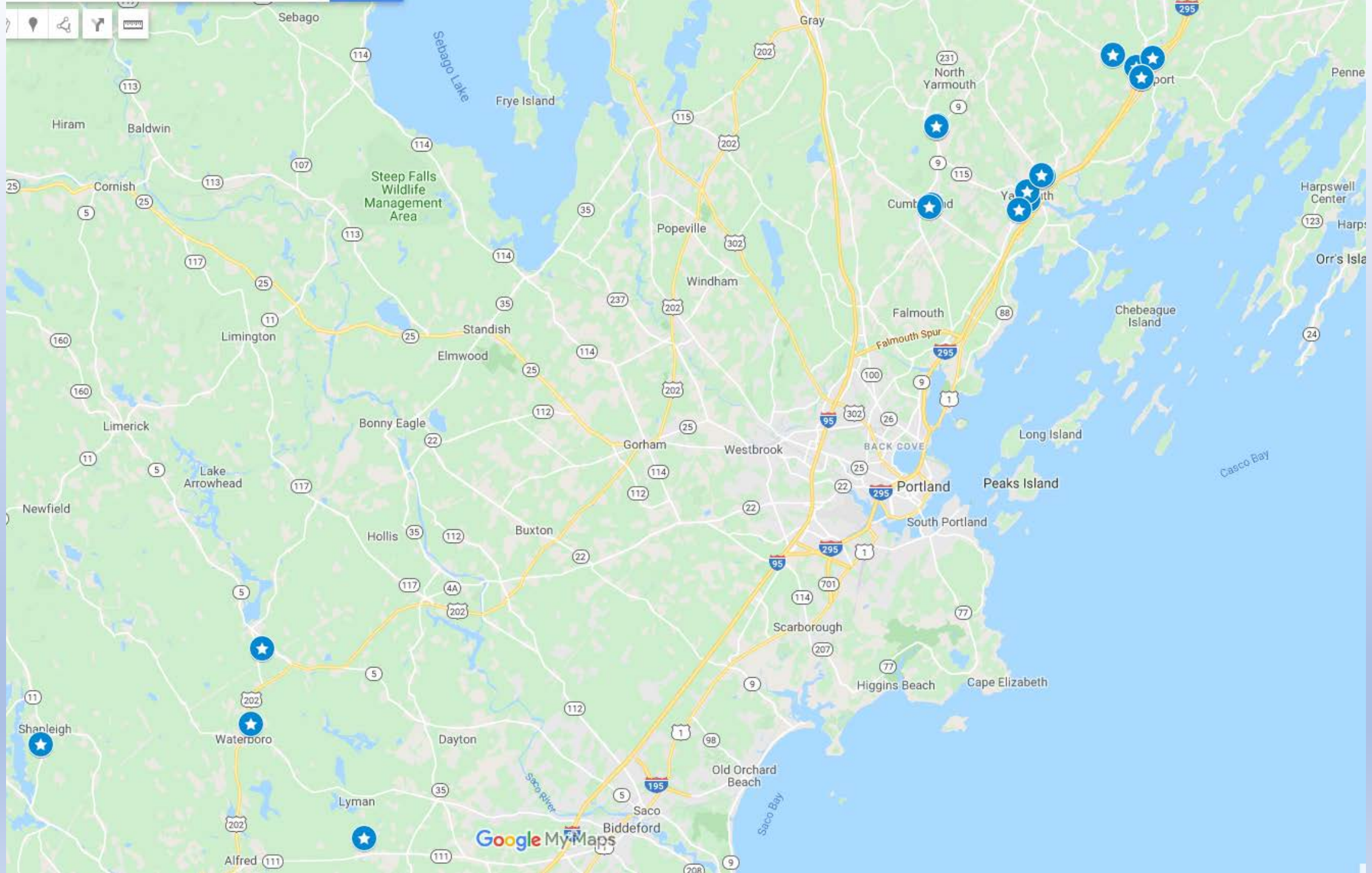
-Provisions its nest with adult buprestids (metallic wood-boring beetles)

-Is capable of finding EAB at low levels

BIOSURVEILLANCE



Biosurveillance:
Cerceris colonies
in southern Maine


Sebago
Sebago Lake
Frye Island
Gray
North Yarmouth
Hiram
Baldwin
Cornish
Steep Falls Wildlife Management Area
Popeville
Windham
Falmouth
Falmouth Spur
Chebeague Island
Harpswell Center
Orr's Isla
Limington
Standish
Elmwood
Limerick
Bonny Eagle
Gorham
Westbrook
BACK COVE
Long Island
Lake Arrowhead
Portland
Peaks Island
Casco Bay
Newfield
Hollis
Buxton
South Portland
Scarborough
Higgins Beach
Cape Elizabeth
Shapleigh
Waterboro
Dayton
Old Orchard Beach
Saco River
Saco Bay
Lyman
Saco
Biddeford
Alfred
Google My Maps

Trapping

Not available

Sylvar
A member of the Andermatt group

New Brunswick

Synergy Semiochemicals Corporation

British Columbia

AgBio

Colorado

Synergy Semiochemicals Corporation

British Columbia

Girdled Trap Trees

Cons:
- Wait 6 months for results
- Destructive
- Labour intensive

Pros:
- Quite sensitive
- Some ash will need to be cut anyway
- Good outreach/education

Branch Sampling

Branch Sampling Guidelines for Emerald Ash Borer – 74% probability of detection

- choose open-grown, semi-mature-mature ash trees, or edge trees
- tree does **not** need to have any EAB symptoms
- roughly 8-20 inch DBH (needs to have branches you can reach)
- cut 2 branches from mid-crown
- choose healthy branches (not dead or dying)
- cut branches from south side of tree (or sunniest side if edge trees)
- branches should be minimum 2-3 inches in diameter, peel basal 20 inches of branch

Woodpecker flecking – “blonding” a good way to monitor in winter

Early in an infestation, woodpeckers can cause over 90% mortality of EAB (in individual trees), 30-50% overall