

# **Three Invasive Insects in Vermont, New Hampshire, and Maine**

**Alan T. Eaton**

**UNH Cooperative Extension**

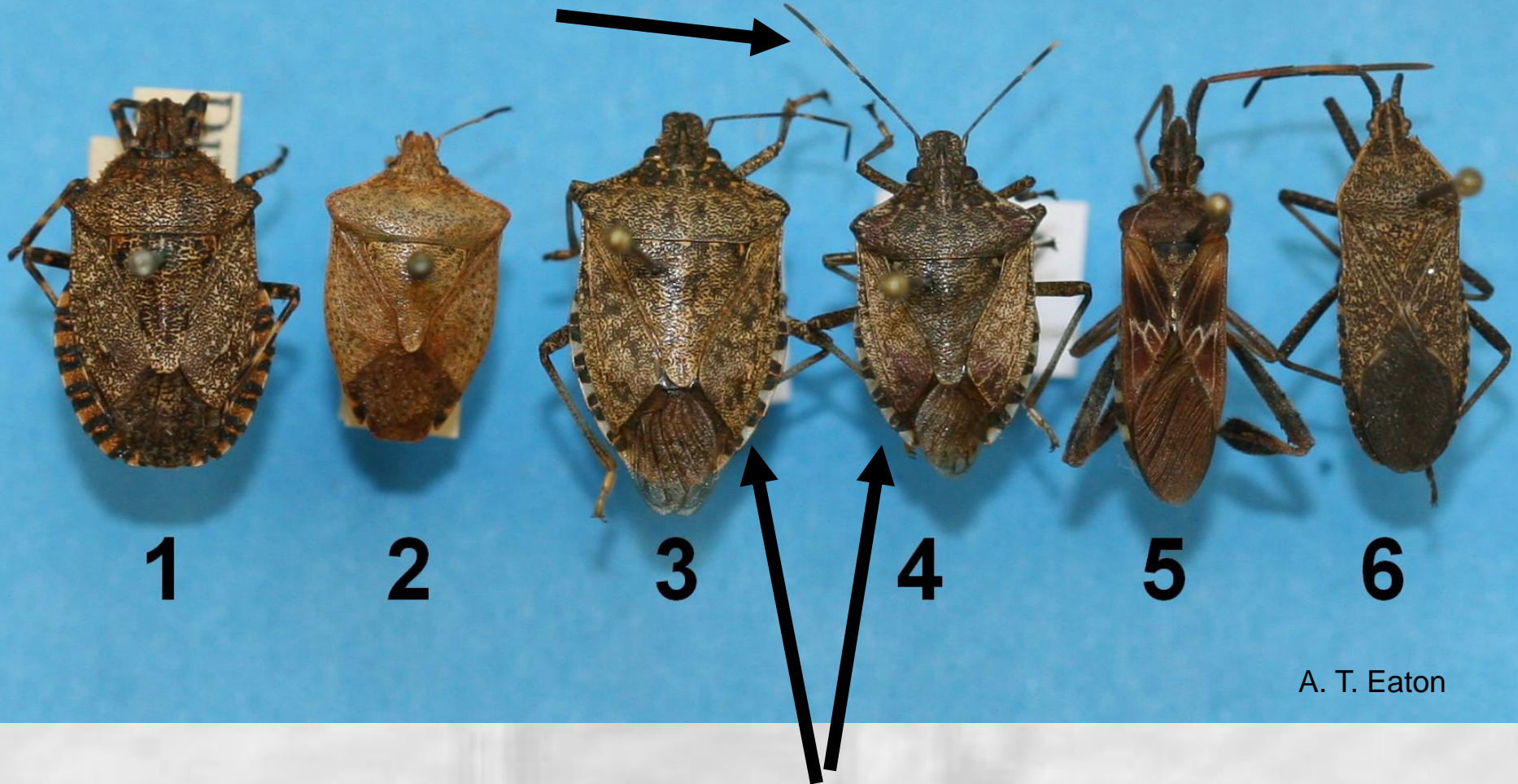
**January 6 - 8, 2015**

# Brown Marmorated Stinkbug

**Discovered in**  
**ME 2006**  
**NH 2010**  
**VT 2011**



# Brown Marmorated Stinkbug

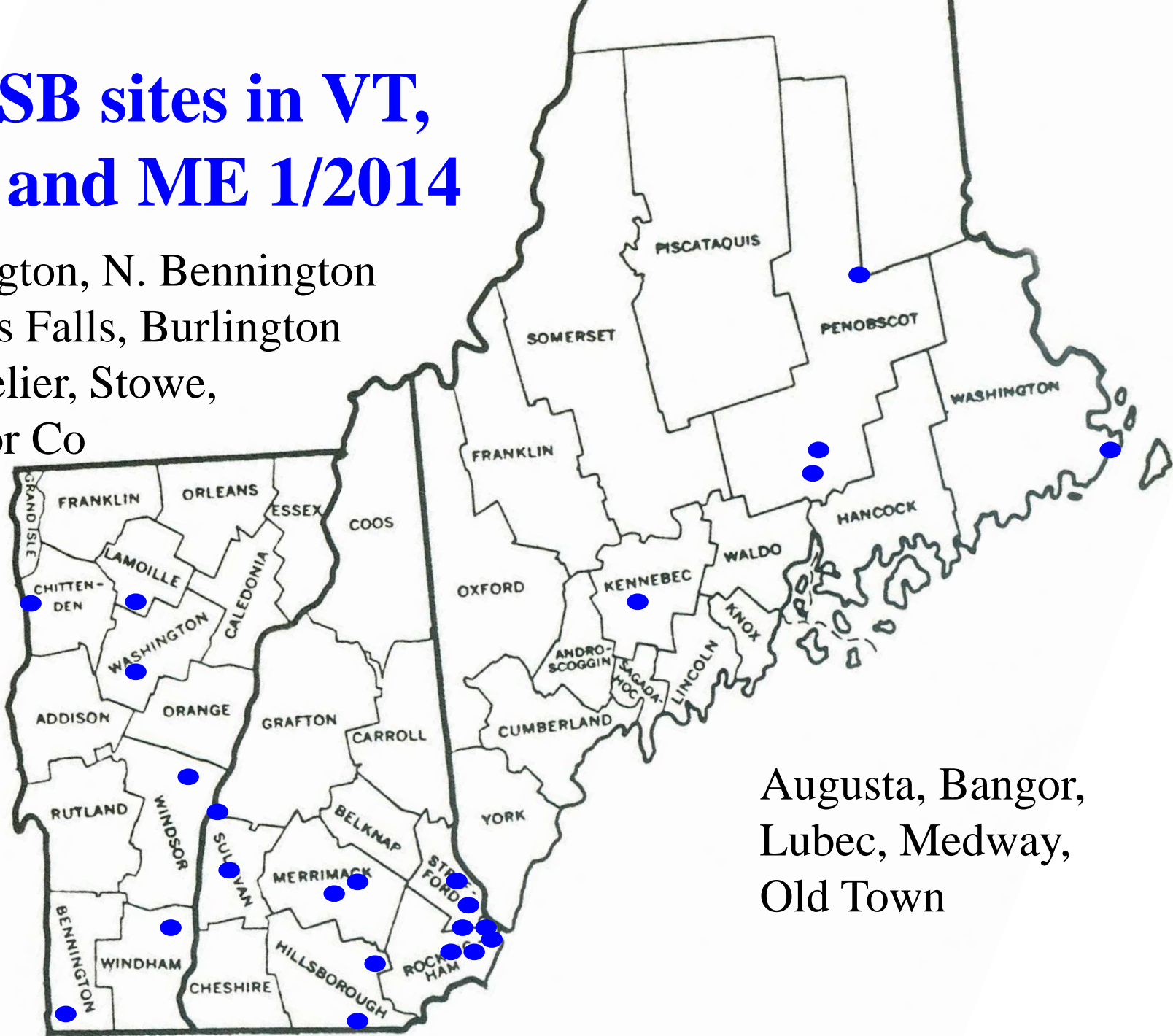


A. T. Eaton



# BMSB sites in VT, NH and ME 1/2014

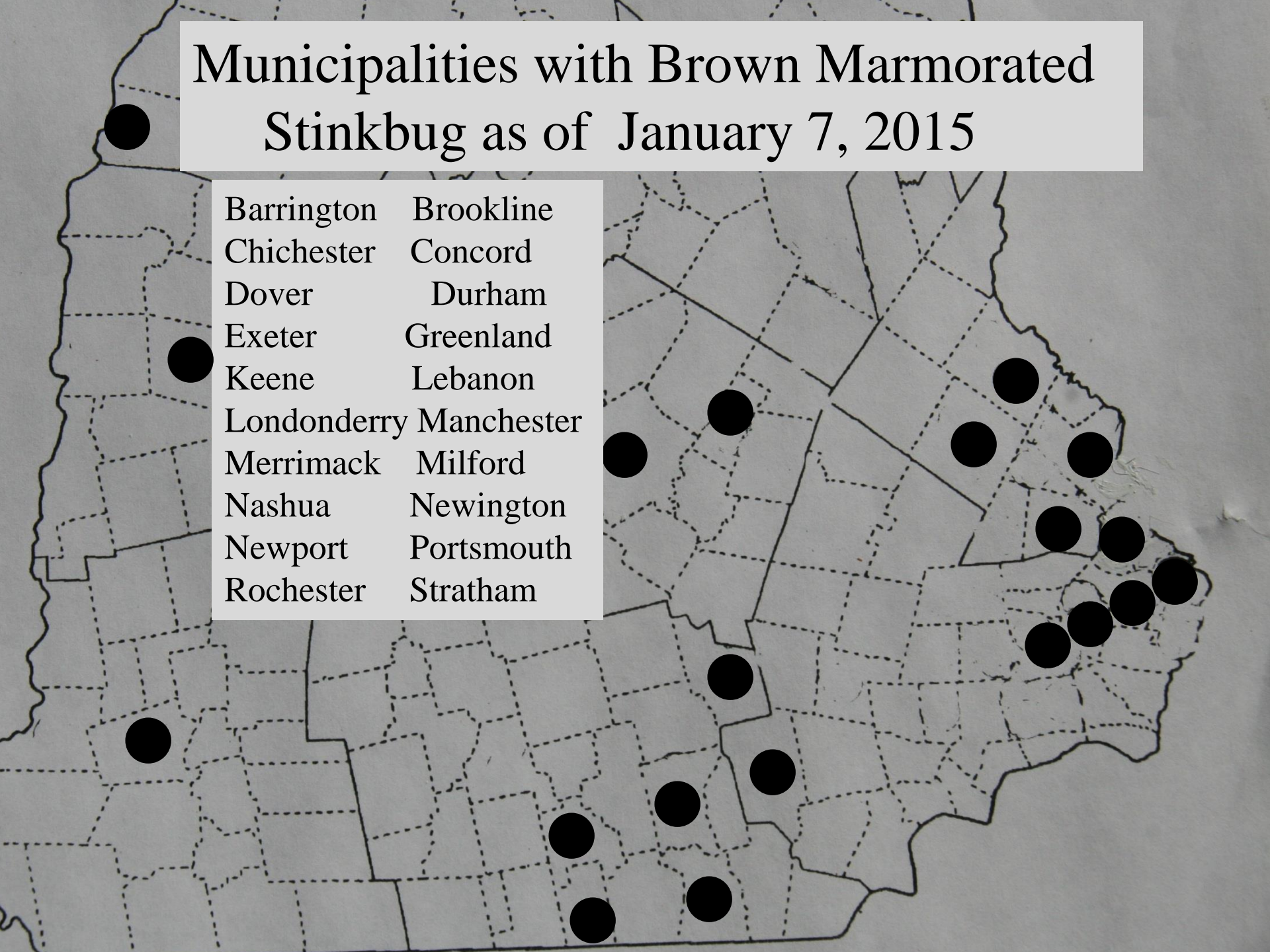
Bennington, N. Bennington  
Bellows Falls, Burlington  
Montpelier, Stowe,  
Windsor Co



Augusta, Bangor,  
Lubec, Medway,  
Old Town

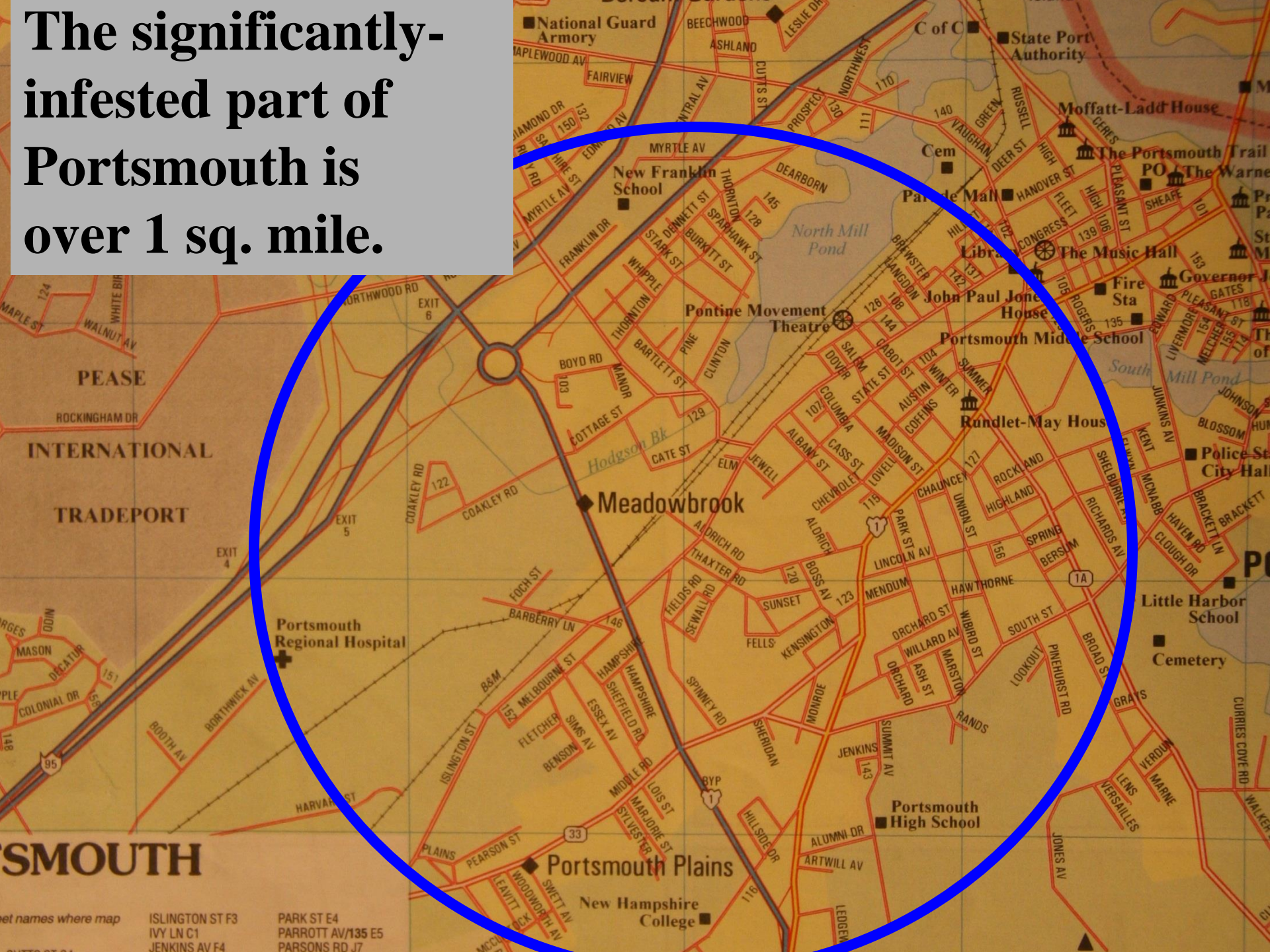
# Municipalities with Brown Marmorated Stinkbug as of January 7, 2015

|             |            |
|-------------|------------|
| Barrington  | Brookline  |
| Chichester  | Concord    |
| Dover       | Durham     |
| Exeter      | Greenland  |
| Keene       | Lebanon    |
| Londonderry | Manchester |
| Merrimack   | Milford    |
| Nashua      | Newington  |
| Newport     | Portsmouth |
| Rochester   | Stratham   |





The significantly-infested part of Portsmouth is over 1 sq. mile.



**The first BMSB damage in agricultural crops close to New England was apple injury in the southern Hudson Riv. Valley of New York, in 2013.**

**In 2014, some Connecticut orchards had significant BMSB's and damage.**

**No other New England BMSB injury has been confirmed.**

**In New Jersey (and neighboring states?) parasitized overwintering BMSB's have been discovered.**

**Preliminary information suggests a native tachinid fly might be responsible, switching to a new host.**



**SWD (spotted wing drosophila) was  
discovered in  
NH/ME/VT  
Sept. 2011.**

**In 2012 it  
ruined  
\$1.516M of  
NH fruit.**



**Most serious damage here:  
bramble fruit  
blueberries**

**So far escaped:  
Cherries  
June strawb.  
Early blueb. &  
brambles**



**Less damage in Northern VT, NH, ME**



# New Developments, 2014

- 1. Effective commercial lures**
- 2. New Insecticides (ex: Exirel)**
- 3. Success with netting, high tunnel**
- 4. 2014 populations increased more slowly,  
and totals were lower than in 2013.**
- 5. Success with “curve balls”.**







## 2015:

1. **Attack should begin July 2-8.**
2. **Heavy attack (Blueb, Brambles) by July 25<sup>th</sup>... (later farther north)**
3. **Highest numbers will be Sept/Oct.**
4. **Sanitation will be important: Remove and destroy all over-ripe fruit promptly. Dumping it on a pile does not destroy it!**
5. **Frequent monitoring will be needed.**
6. **Controls should be tied to monitoring.**

# Spraying

**1. Spinosad, Malathion, Syn. Pyrethroids**

**2. Spraying interrupts PYO picking patterns. Sprays control for 1- 6 days**

**3. Pesticide effectiveness:**

**<http://www.ipm.msu.edu/SWD.htm>**

**4. SWD in NH website:**

**<http://extension.unh.edu/Agric/AGPMP/Spottedwingdrosophila.htm>**



# Fruit Quality

**Refrigerate fruit!!**

**Lightly infested fruit probably can be eaten (soon) with no noticeable effects.**

**Infested fruit that are held for several days will decompose quickly.**

**Emerald Ash Borer hasn't been found in VT or ME yet. In NA it hits only Ash (*Fraxinus*). Highly mobile!**



Photo: David Cappaert,  
Mich State Univ. [Bugwood.org](http://Bugwood.org)



**Discovered in USA: Michigan 2002**

**By 2011: 18 midwest & eastern states, plus  
Ontario & Quebec**

**2012: Tolland, CT,  
Berkshire Co, MA**

**2013: Concord, NH, Andover MA**

**2014 NH: 5 Merrimack Co towns, 1 Hillsb  
(Weare), 1 Rockingham Co town (Salem)**

**Vermont & Maine: Not yet found as of  
December 2014**





**Kills:**  
White ash  
Green ash  
Black ash

**Firewood & log quarantines in  
Merr., Hillsb., Rock. Counties**





**Questions?**