

A dark-themed map of the Great Lakes region. The Great Lakes (Superior, Michigan, Huron, Erie, and Ontario) are highlighted in a dark blue color. State names are visible in a light grey font: MINNESOTA, WISCONSIN, MICHIGAN, IOWA, ILLINOIS, INDIANA, OHIO, PENNSYLVANIA, NEW YORK, VERMONT, MASSACHUSETTS, CONNECTICUT, and NEW JERSEY. The text '2019 BMSB SCRI Annual Report' and 'Great Lakes Region' is overlaid in white.

2019 BMSB SCRI Annual Report

Great Lakes Region

Minnesota

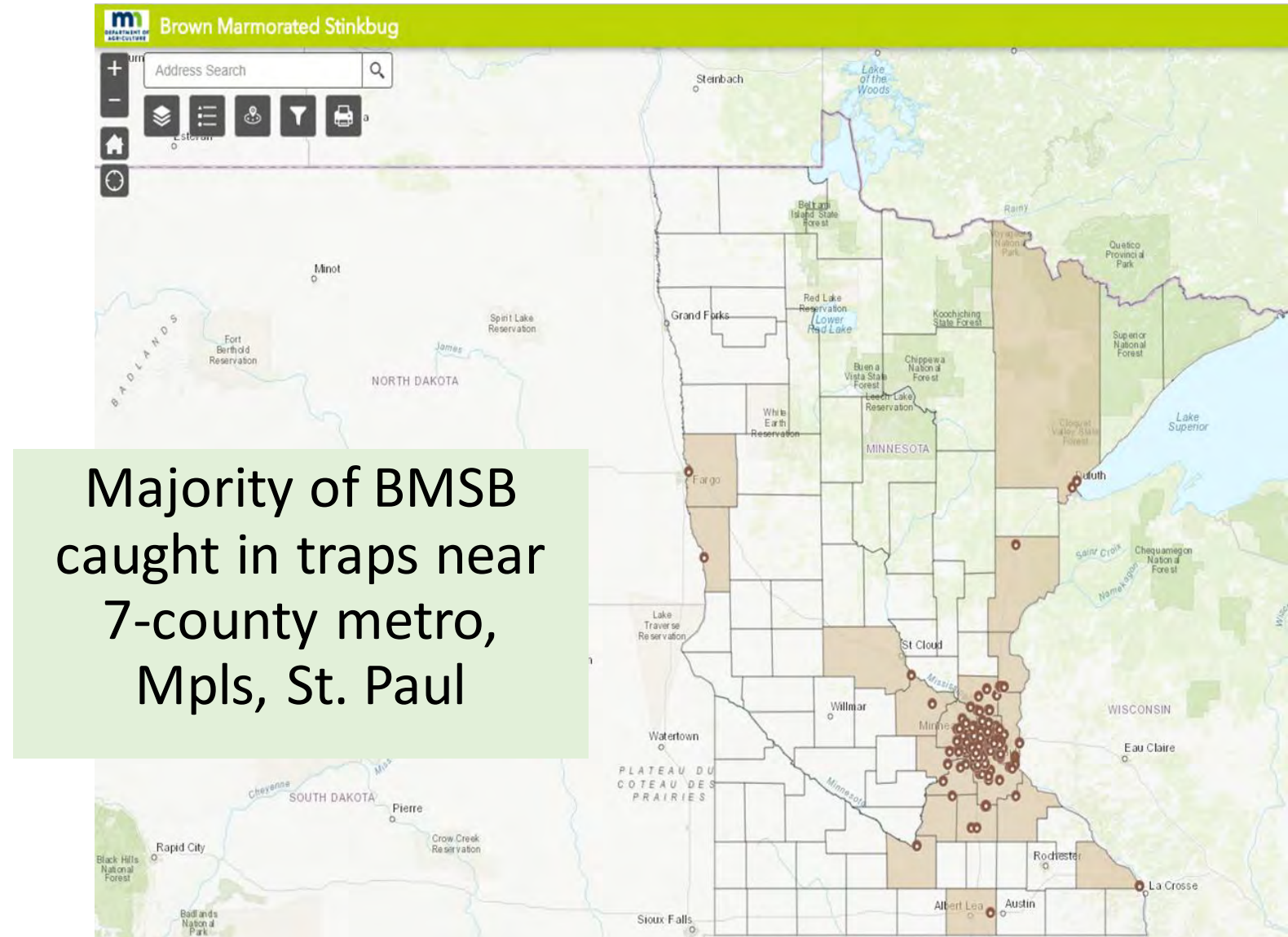
Bill Hutchison
Bob Koch
Co-PIs

Eric Burkess
Research Assoc.

Angie Ambourn
Collaborator
MN Dept Ag

**University
of
Minnesota**

MDA, BMSB Monitoring results: cumulative, 2016-2019



Minnesota

Bill Hutchison

Bob Koch

Co-PIs

Eric Burkess

Research Assoc.

Angie Ambourn

Collaborator

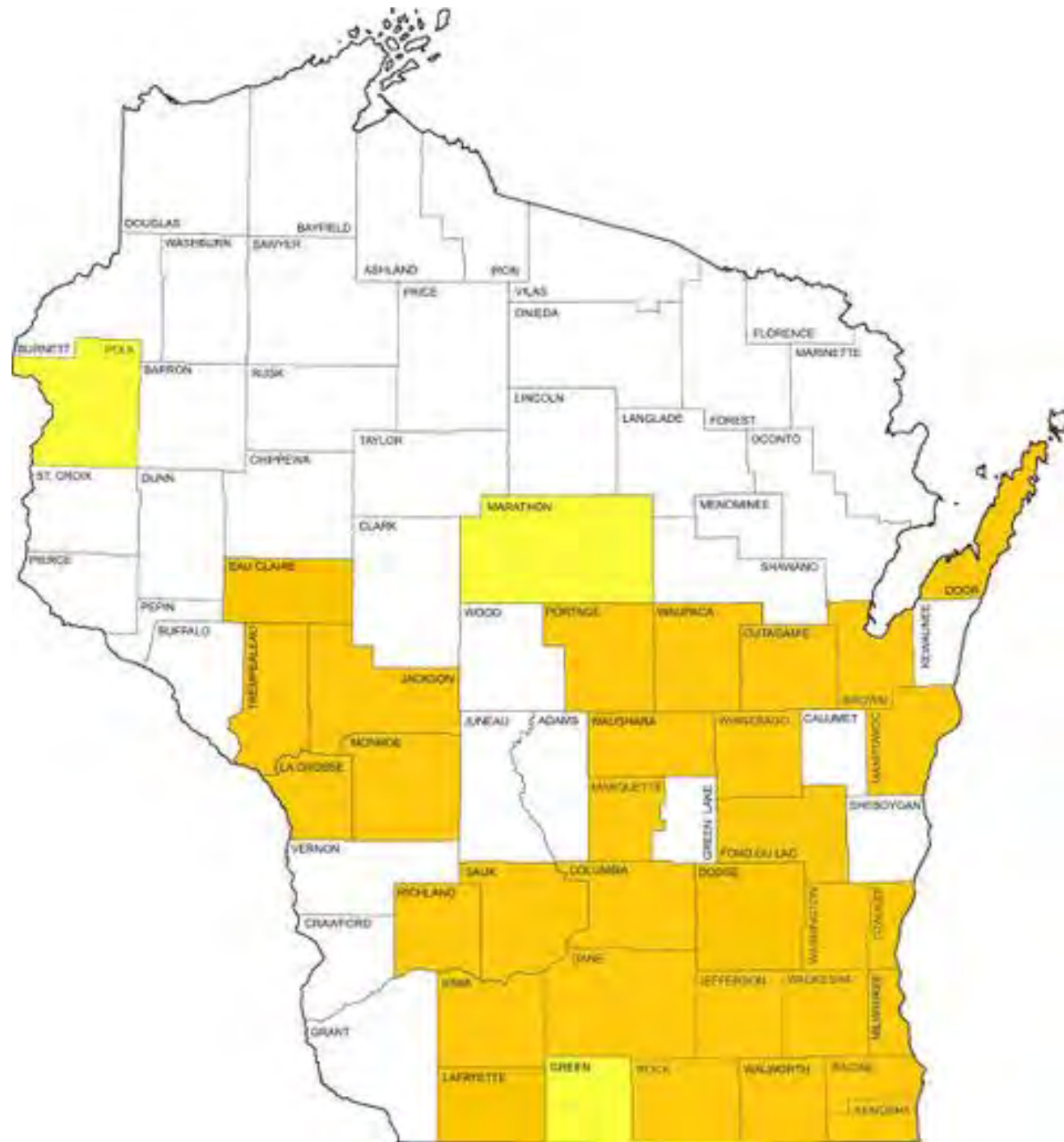
MN Dept Ag

Univ. of Minnesota and MDA

MDA-UMN, BMSB Monitoring results: Cumulative, 2016-2019, key outcomes

- **2019 BMSB -- Fall Orchard Survey**
 - 49 Orchards. *Clear sticky traps with species specific lure set at all 49 locations*
 - BMSB was detected at 9 orchard sites in total in 2019. (6 in 2018)
- **20 Counties** (Brown, Carver, Chisago, Dakota, Douglas, Goodhue, Hennepin, Le Sueur, McLeod, Mille Lacs, Olmsted, Pine, Ramsey, Rice, Scott, Stearns, Steele, Wabasha, Waseca, Washington, Wright)
 - **2019 First Finds:**
 - Wozupi Tribal Gardens, Scott County, 1 Adult
 - Carpenter Nature Center, Washington County, 3 nymphs
 - Apple Junction, Washington County, 1 Adult
 - Cricket Hill, Goodhue County, 1 adult; first detection in Goodhue County
- **Tracked number of webpage visits for MDA pest webpages 9/1/2016-9/30/2019**
- **BMSB: 14,989** (google analytics)

Wisconsin

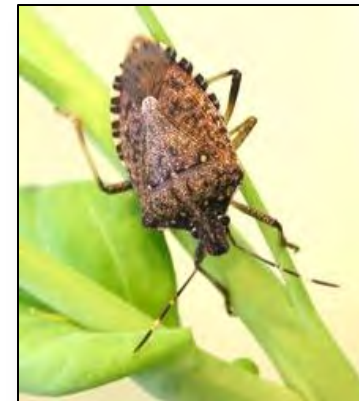


Status as of 2019:

- Confirmed in 30 counties (orange)
- Suspected in at least 3 others (yellow)
- No reports of fruit damage

Christelle Guédot

**University
of
Wisconsin**



Michigan

Larry Gut

Julianna Wilson

Marianna Szucs*

Co-PIs

Benjamin Jarret*

John Pote

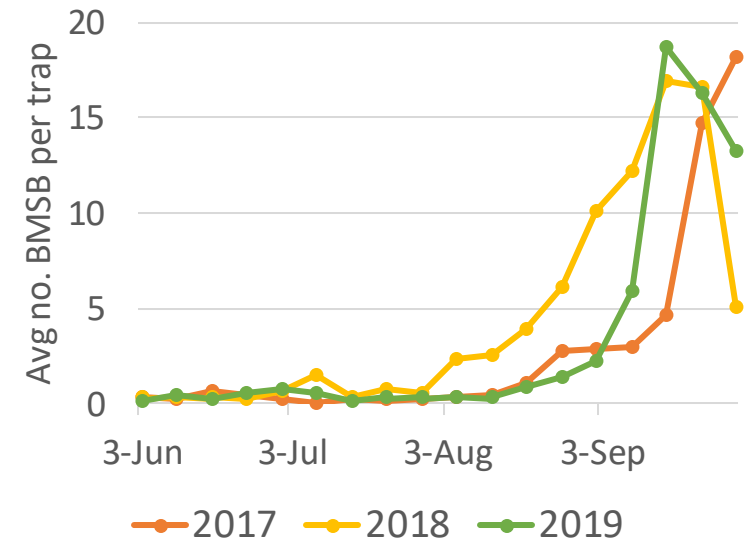
Research Associates

Olivia Simaz*

Graduate Student

Michigan State University

- ❖ 2019 BMSB Monitoring Efforts
 - ❖ Detected in all counties in LP; still most abundant in southern MI, especially around major urban areas.
 - ❖ 10 collaborators checking traps at 60+ sites in 20 counties in 11 crops/habitats.
 - ❖ 6,181 nymphs+adults caught, 60% of 2018 total.
 - ❖ Delayed onset of activity with respect to traps and fruit injury compared with 2018; less fruit injury reported.
 - ❖ Monitoring at a few “hot spots” in southern Michigan drove the averages; still very few caught in northern sites.



Total N+A

2017: 2,844 in 101 traps

2018: 10,263 in 154 traps

2019: 6,181 in 112 traps

Michigan

Larry Gut

Julianna Wilson

Marianna Szucs*

Co-PIs

Benjamin Jarret*

John Pote

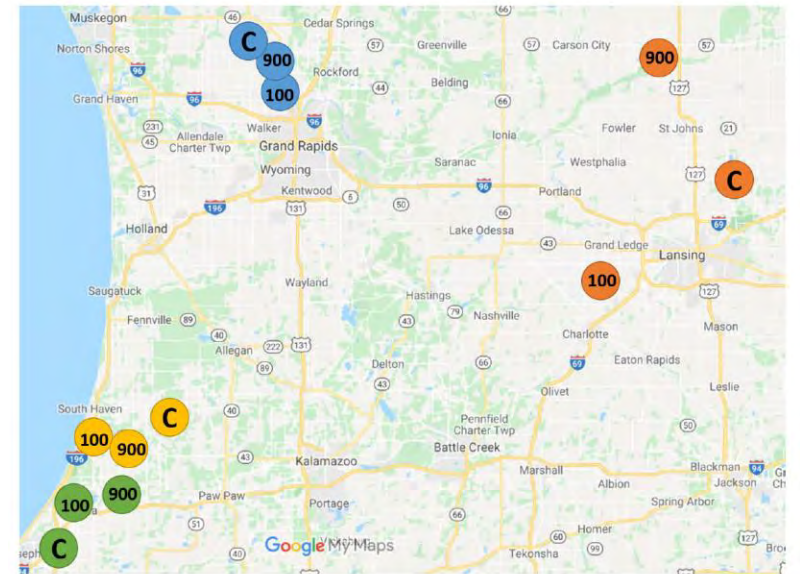
Research Associates

Olivia Simaz*

Graduate Student

Michigan State University

- ❖ *Trissolcus japonicus*
 - ❖ 2017: Monitored with YST at 24 sites, no detections (Wilson).
 - ❖ 2018: Monitored with YST (Wilson) and BMSB egg masses (Szucs, Jarret); T.j. emerged from one egg mass (Jarret).
 - ❖ 2019: Lab-reared population released at 4 sets of sites (Szucs, Simaz); also provided MI replicates for Joe Kaser experiment (Pote); egg masses deployed but only native parasitoids recovered (Simaz, Pote).
 - ❖ 2020: Continuing this work.



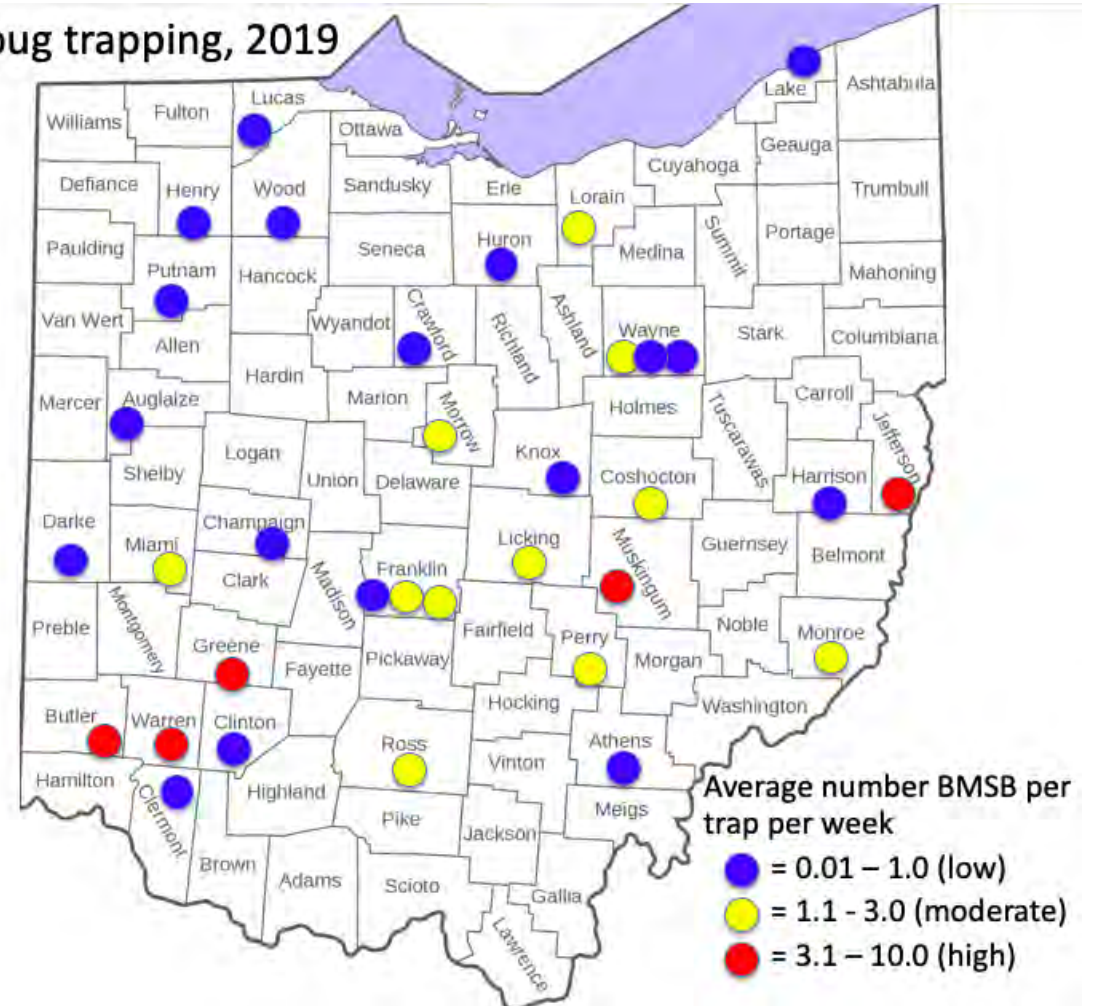
Ohio

- First detect in 2007
- Confirmed in 63 of 88 counties
- A few urban hot spots
- Still low density in most rural areas
- Damage in research trials, 2019, Columbus:
 - Apple: 6% in untreated plots
 - Sweet corn: 60% in untreated plots
- Commercial farms:
 - Some reports of damage: peach, apple
 - Possibly misdiagnosed? under-reported?
 - Also concern in soybeans

Celeste Welty

The Ohio State University

Stink bug trapping, 2019



Update on Research Studies on Brown Marmorated Stink Bug, *Halyomorpha halys* Stål (Hemiptera: Pentatomidae) in NYS

New York

Art Agnello
CALs - AgriTech

Lydia Brown
Peter Jentsch
CALs – AgriTech
/HVRL

Elizabeth Tee
CCE-LOFT

**Cornell
University**

- Populations of BMSB were higher in 2019 than in recent years
- Fall urban infestations increased (Citizen Science respondents)
- All pheromone trap monitoring sites for BMSB had captures
- WNY trap site exceeded thresholds (10 adults/trap) in 5 of 6 sites by mid-Sept.
- ENY trap sites exceeded thresholds beginning 16 Aug. – 13 Sept.
- Marlboro site (First find of *T. japonicus* 2016) exceeded threshold beginning 16 Aug. with 160 BMSB/wk by 30 Sept.
- To date, *T. japonicus* has been redistributed to 104 sites in NYS.
- 2019 ID of *T. japonicus* from Alpha Scents YS cards in process



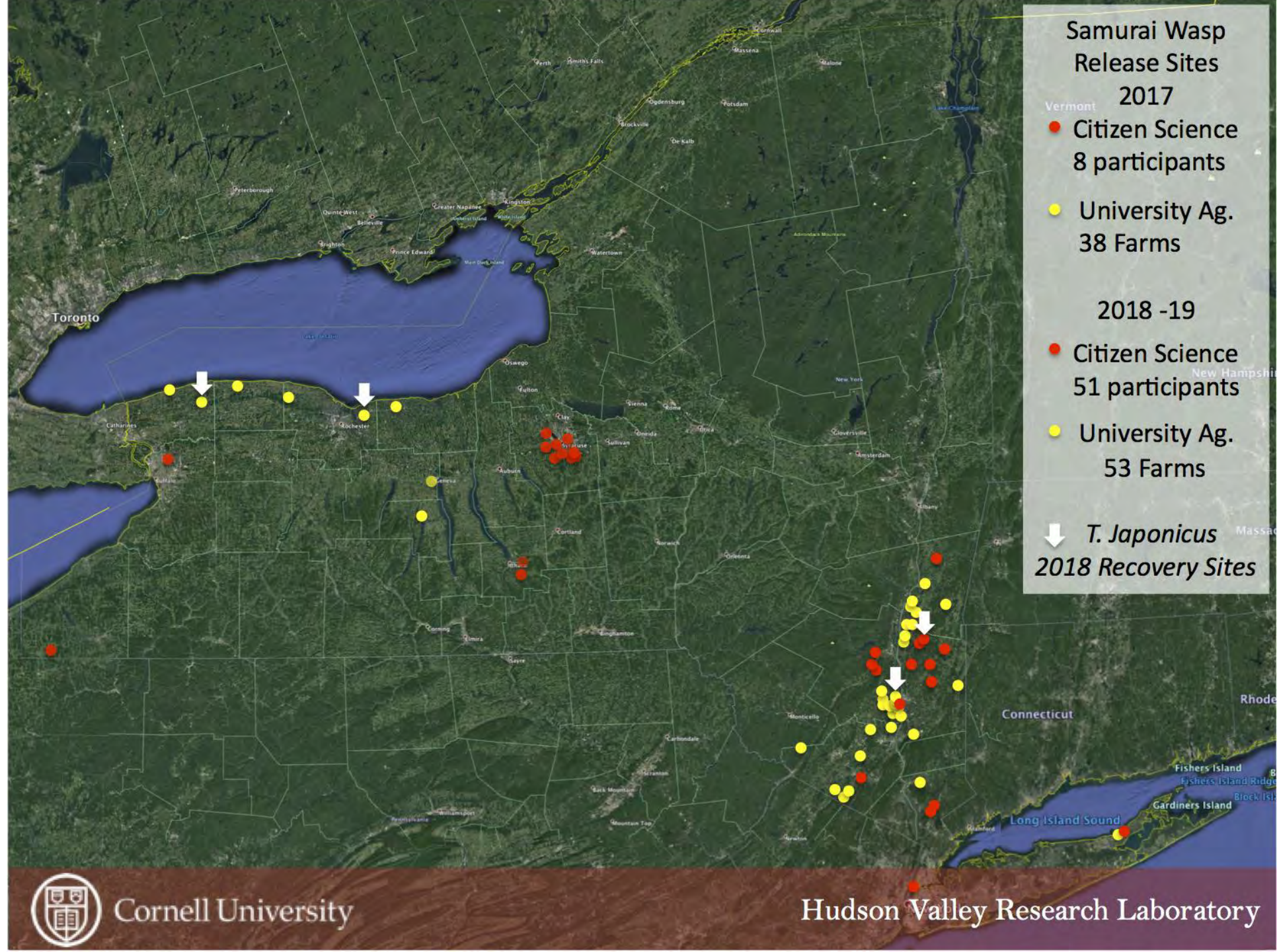
New York

Art Agnello
CALs - AgriTech

Lydia Brown
Peter Jentsch
CALs – AgriTech
/ HVRL

Elizabeth Tee
CCE-LOFT

Cornell University



New York

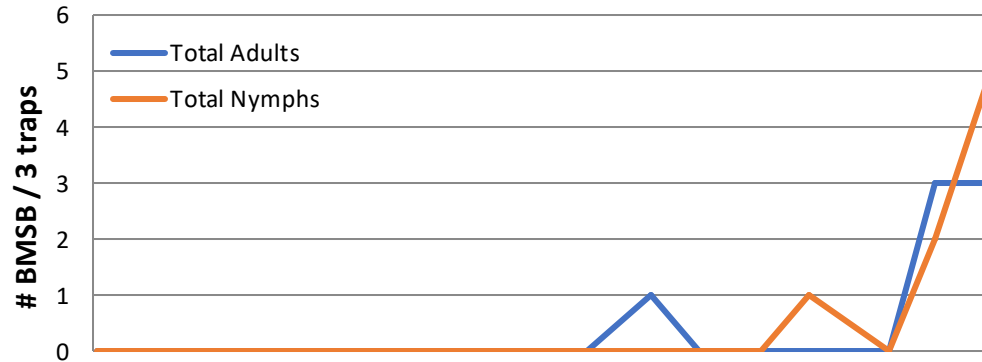
Art Agnello
CALs - AgriTech

Lydia Brown
Peter Jentsch
CALs - AgriTech
/ HVRL

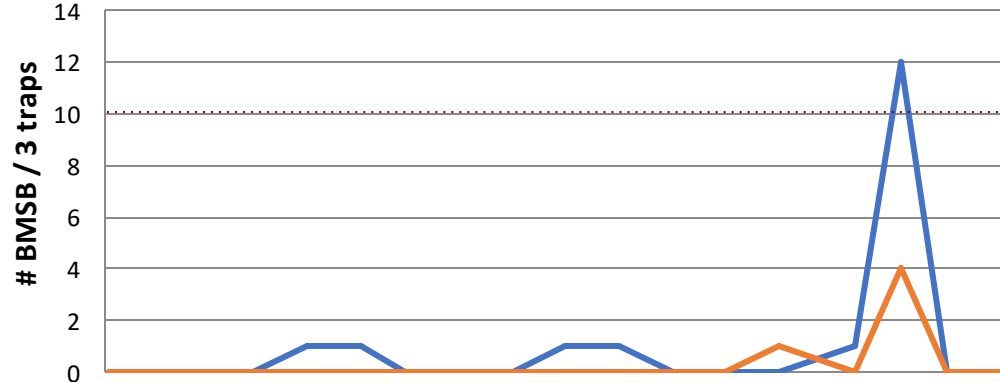
Elizabeth Tee
CCE-LOFT

Cornell
University

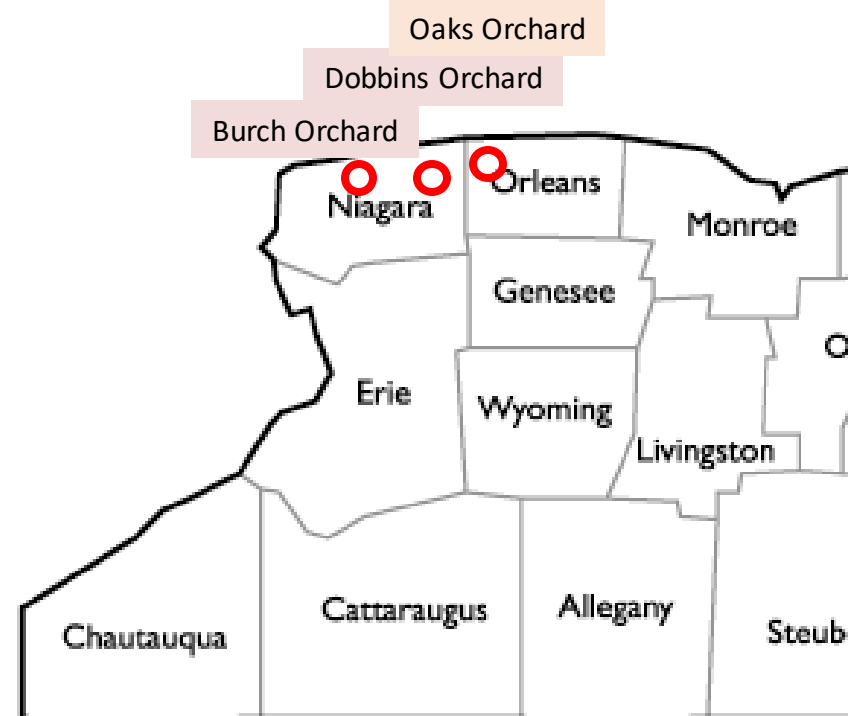
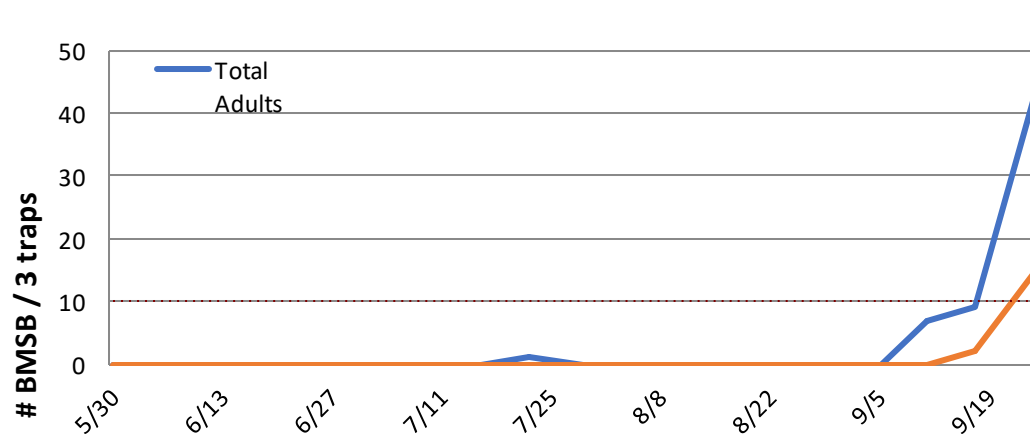
BMSB Pheromone Trap Capture
Burch Orchard, Niagara Co, WNY - 2019



Dobbins Orchard, Niagara Co, WNY - 2019



Oaks Orchard, Orleans Co, WNY - 2019



New York
Western
NY

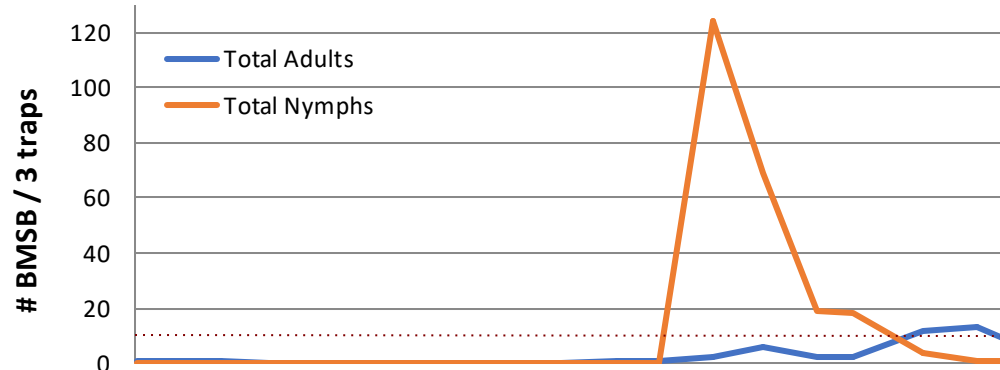
Art Agnello
CALs - AgriTech

Lydia Brown
Peter Jentsch
CALs - AgriTech
/ HVRL

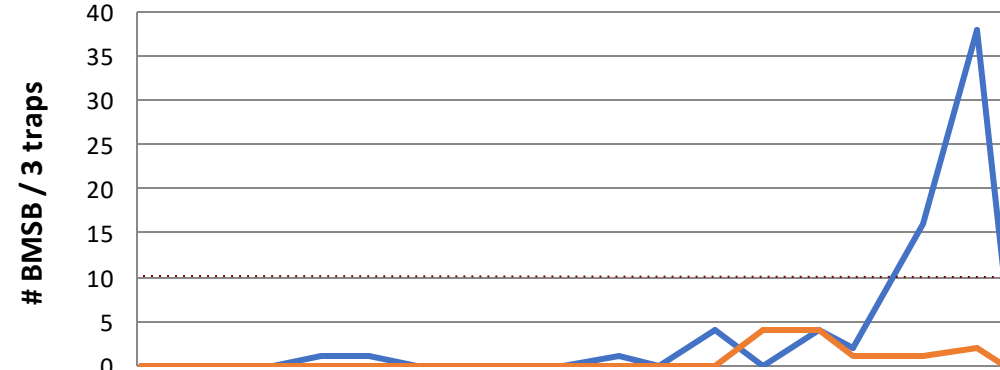
Elizabeth Tee
CCE-LOFT

**Cornell
University**

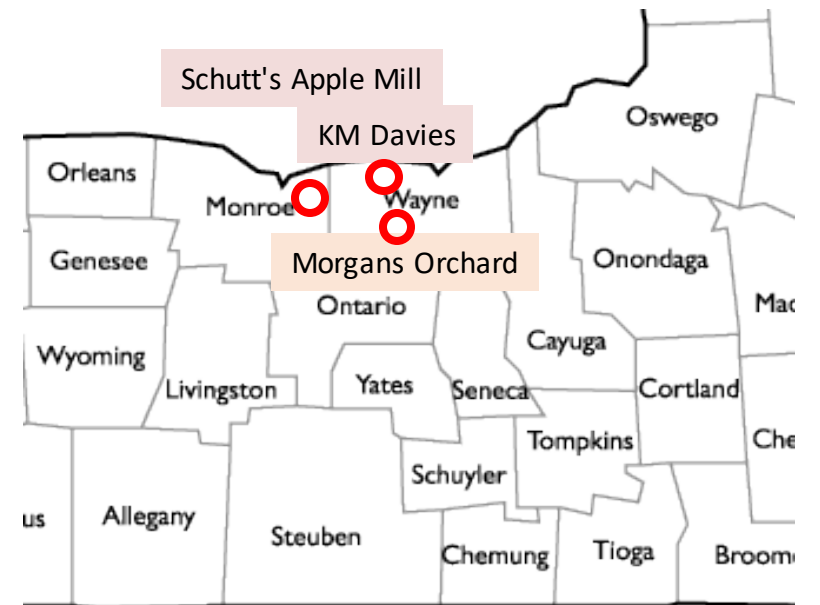
**BMSB Pheromone Trap Capture
Schutt Orchard, Monroe Co, WNY**



Morgan Orchard, Wayne Co, WNY



KM Davies Orchard, Wayne Co, WNY



New York Hudson Valley

Art Agnello
CALs - AgriTech

Lydia Brown
Peter Jentsch
CALs -
AgriTech / HVRL

Elizabeth Tee
CCE-LOFT

Cornell University

