

The background of the slide features a large, faint watermark of the Rutgers University seal. The seal is circular and contains the text "RUTGERS UNIVERSITY" around the perimeter and "1823" at the bottom. The seal is centered behind the main title text.

# RUTGERS

New Jersey Agricultural  
Experiment Station

## **Brown Marmorated Stink Bug ID and the Use of Blacklight Traps**

George C. Hamilton

Department of Entomology

Rutgers University

# Common Native Stink Bugs



©MARLIN E. RICE

**Brown Stink Bug, *Euschistus servus***



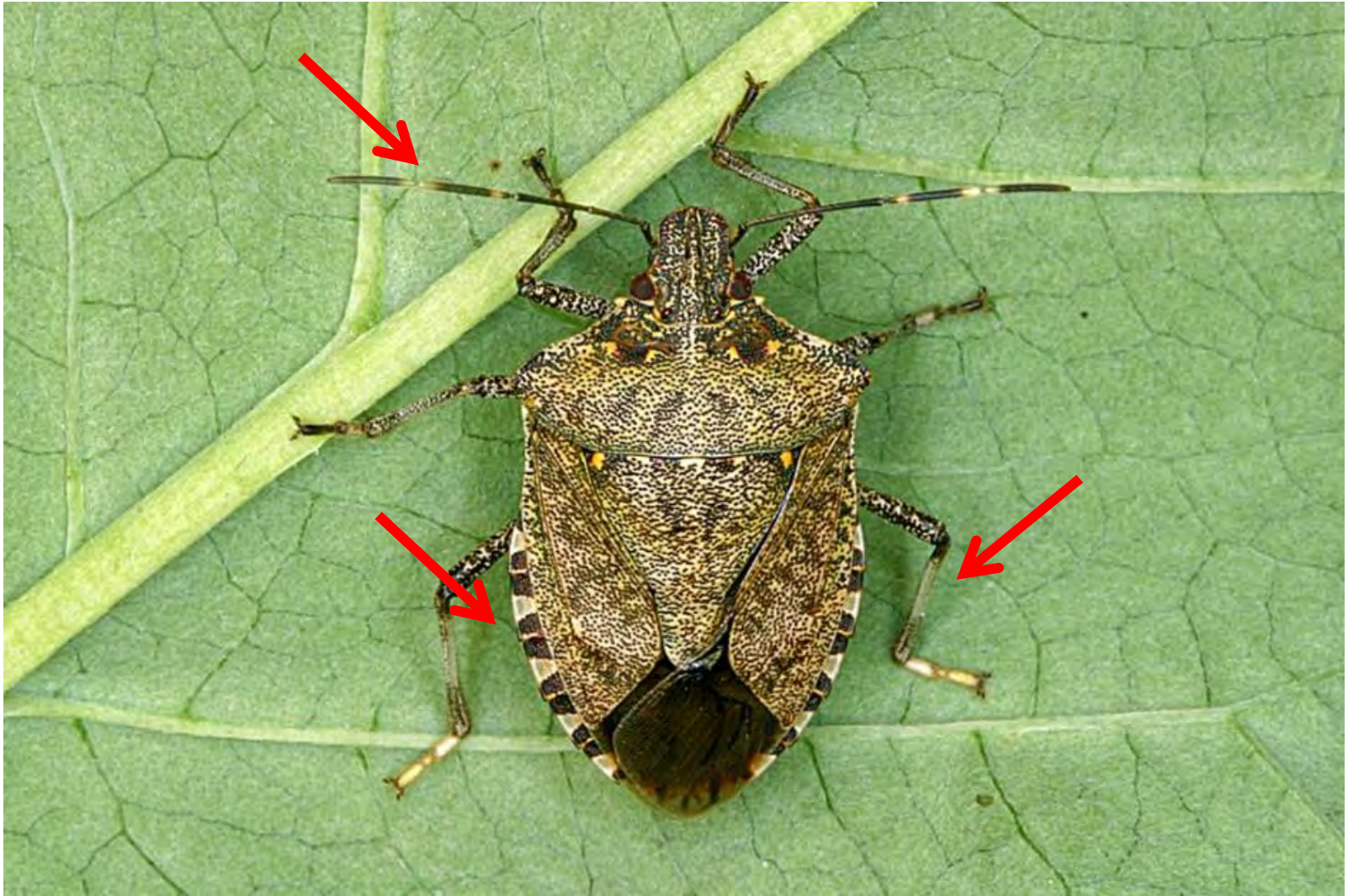
**Spined Soldier Bug, *Podisus maculiventris***

# **Rough Stink Bug**

*Brochymena quadripustulata*







**Brown Marmorated Stink Bug, *Halyomorpha halys***

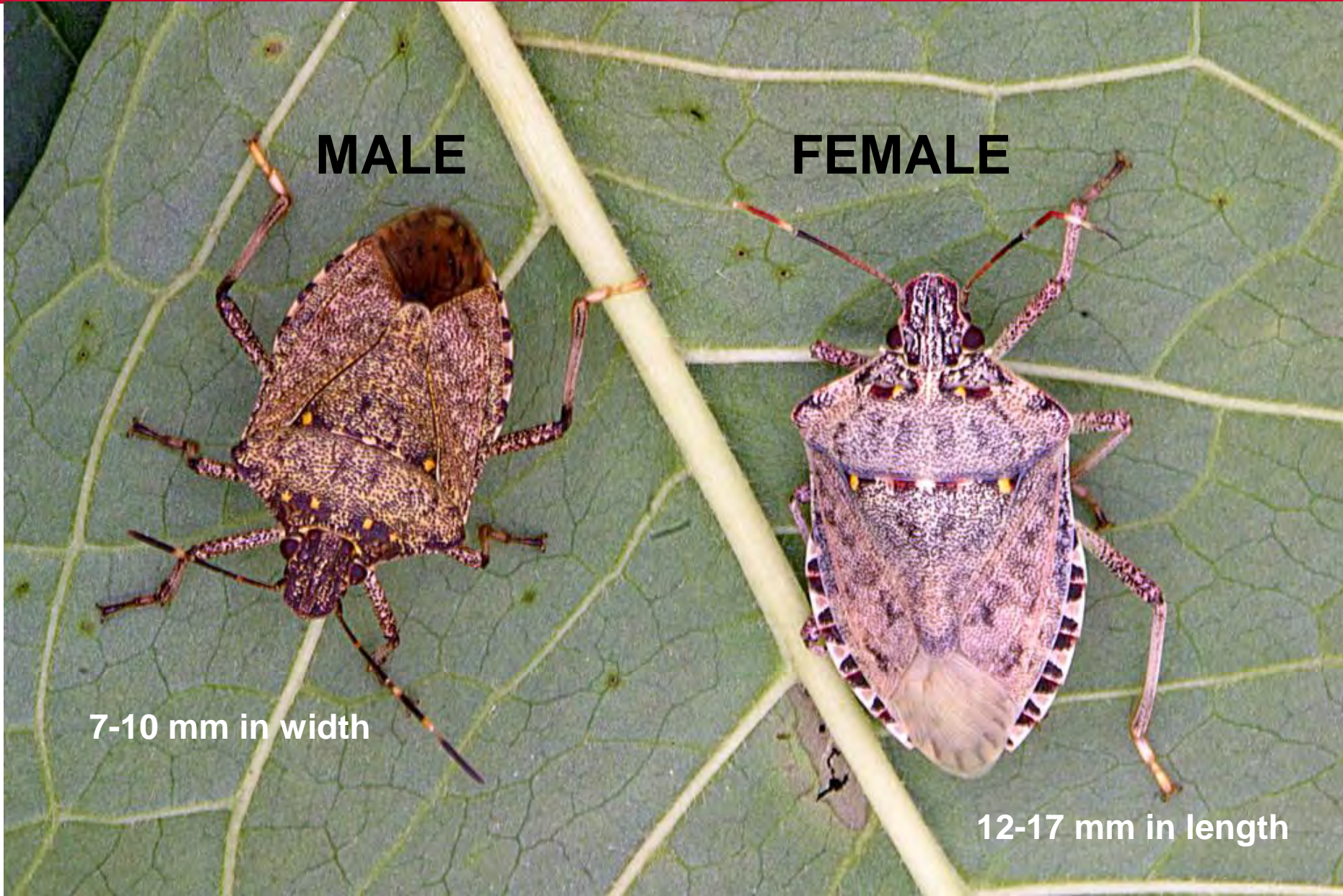


**MALE**

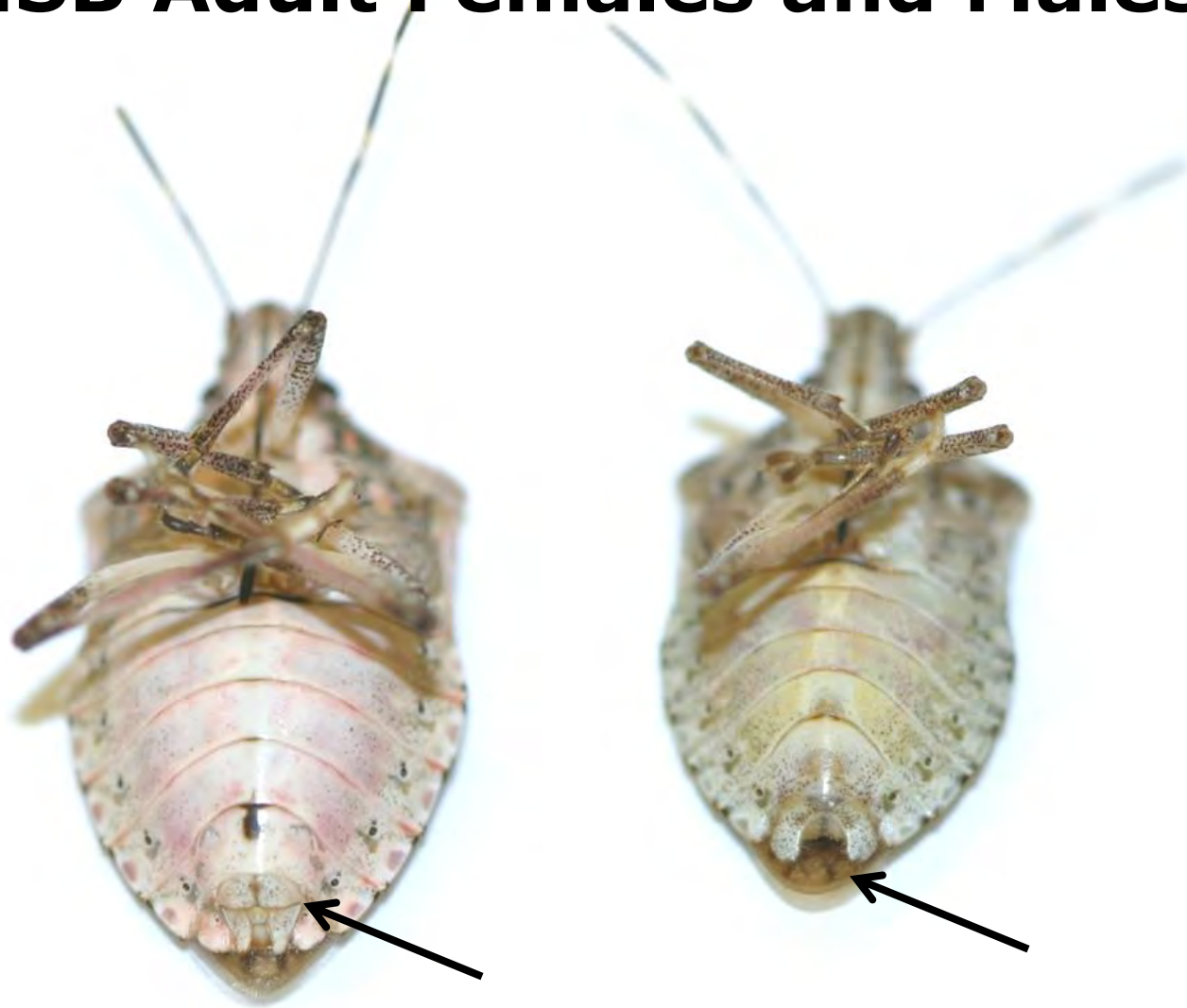
**FEMALE**

7-10 mm in width

12-17 mm in length



# BMSB Adult Females and Males



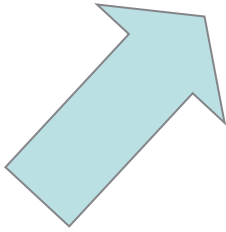


**Summer**

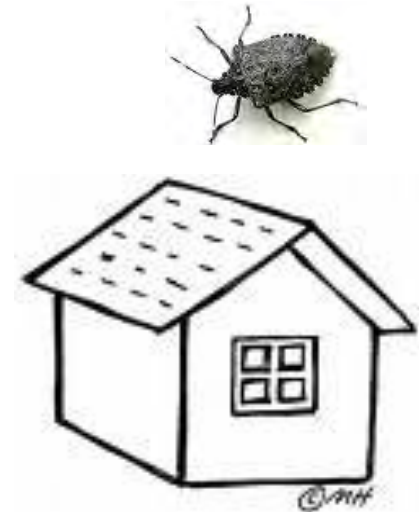
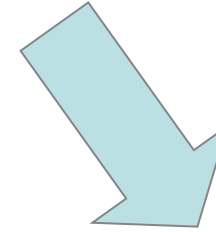
1 to 2 generations



**Spring**



**Fall**









RUTGERS

New Jersey Agricultural  
Experiment Station



Photo by D. Matadha



Photo by D. Matadha



~3.7 mm

**Second Instar**

**Third Instar**

Photo by D. Matadha



~5.5 mm



Photo by D. Matadha



~8.5 mm

**Fourth Instar**

**Fifth Instar**

Photo by D. Matadha



~12.0 mm

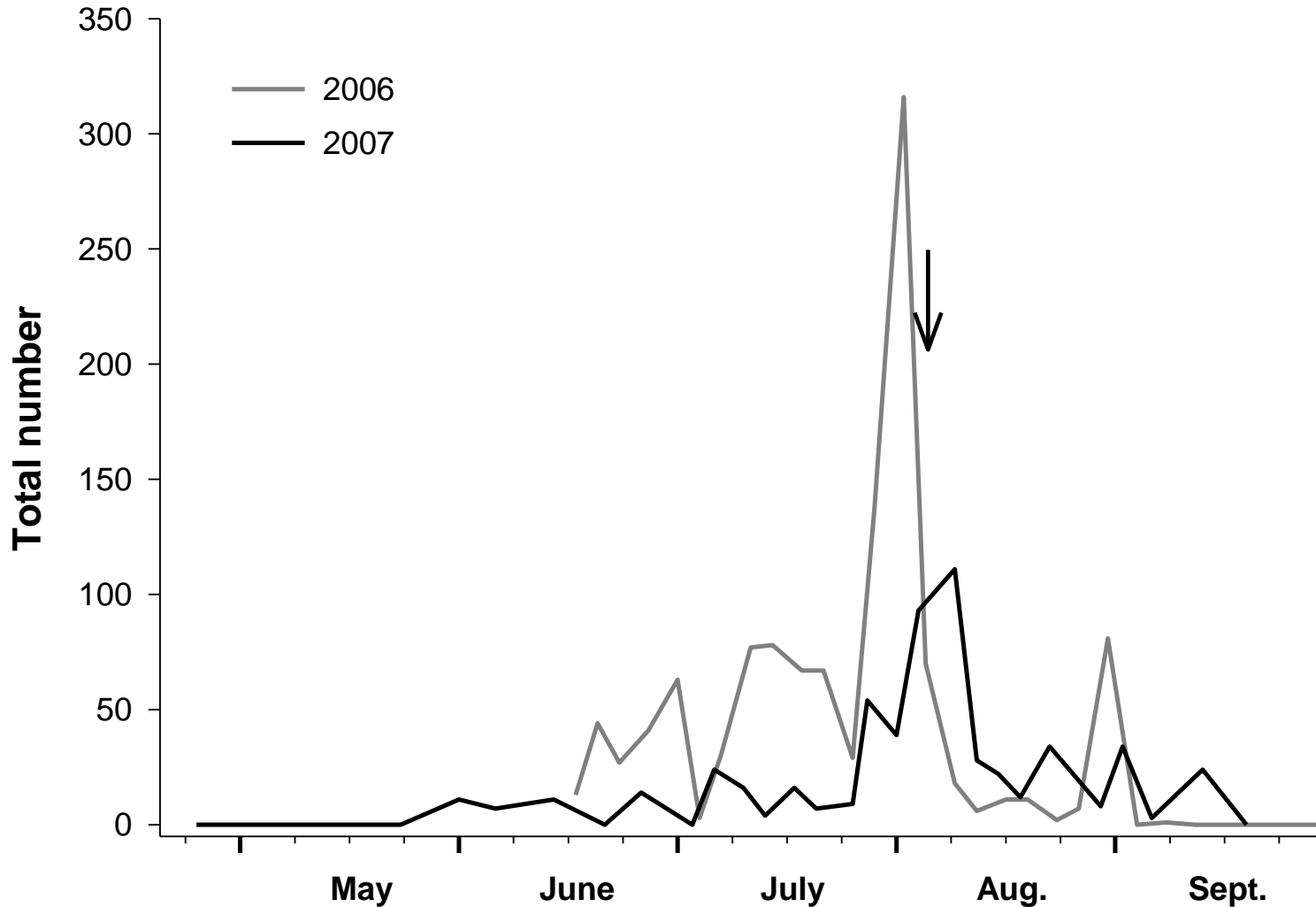


# Use of Blacklight Traps to Monitor BMSB Adults





# Seasonal Flight Activity



# Blacklight monitoring



Locate NJ blacklight traps

Trimble GeoExplorerII

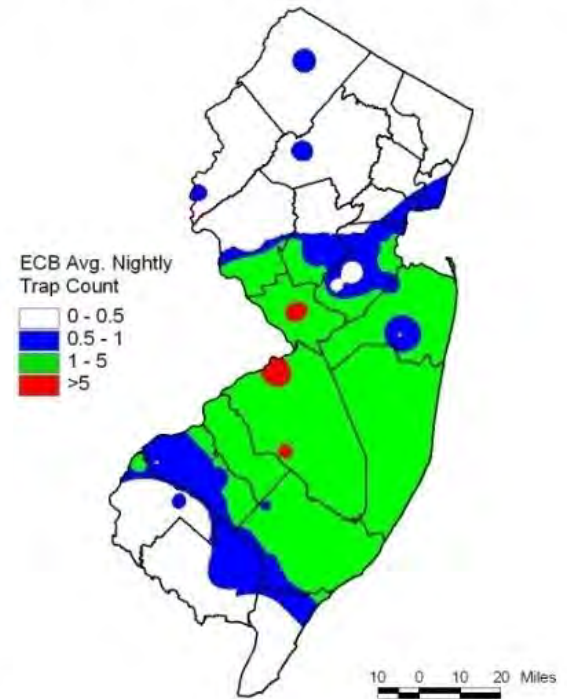


Link with weekly trap counts

Example: ECB counts 1999

TRAP ID	TRAP	J145	J146	J147	J148	J149	J150	J151	Avgwk3
1	Newton	0	0	0	0	0	1	1	0.17
3	Morristown	0	0	0	0	0	1	1	0.29
5	Chester	0	0	0	0	0	0	0	0.00
6	Long Valle	0	0	0	0	0	0	1	0.14
7	Denville	0	0	0	3	3	3	3	1.71
10	Flanders	0	0	0	0	1	1	1	0.43
127	Quakertown	0	0	1	1	1	1	2	0.83
131	SnyderFar	0	0	1	1	1	2	1	0.83
18	Jutland	0	0	0	0	0	0	1	0.14
19	Milford	0	1	1	1	1	1	2	1.00
20	Oldwick	0	0	0	0	0	1	1	0.29

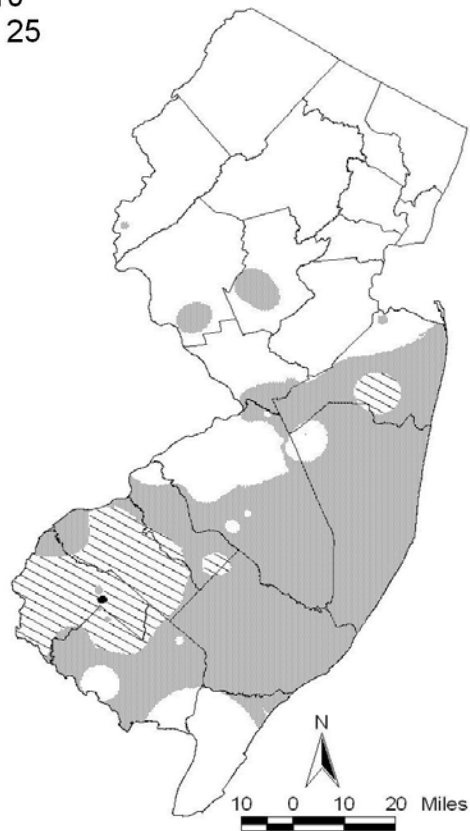
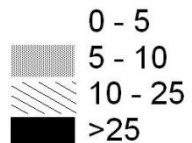
Distribution of Adult European Corn Borer  
for the Week Ending July 27, 2011



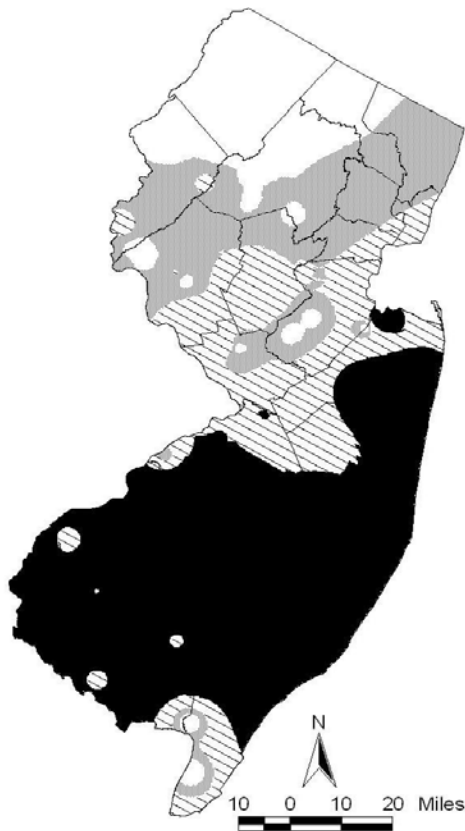
Collected and processed by: Kris Holmstrom, Marilyn Hughes  
Cooperative Extension & Center for Remote Sensing



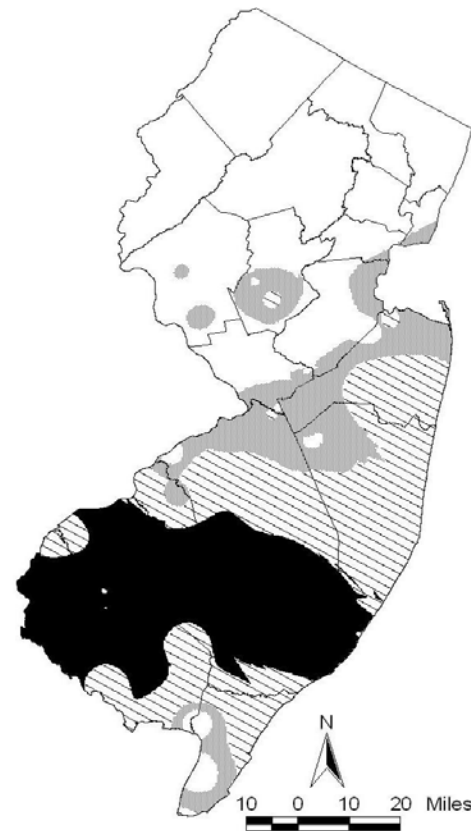
# Tracking the Weekly Spread of BMSB



**July 20, 2011**



**July 27, 2011**



**August 3, 2011**

# Tracking the Spread of BMSB





# What Trap To Use?



## **Advantages & Disadvantages**

- **Advantages**
  - Catch both sexes
  - Season long attraction
  - Can detect 1<sup>st</sup> incidence on a farm
- **Disadvantages**
  - Cost of traps
  - Labor expense
  - No correlation with crop damage
  - Lack of nymphal data



