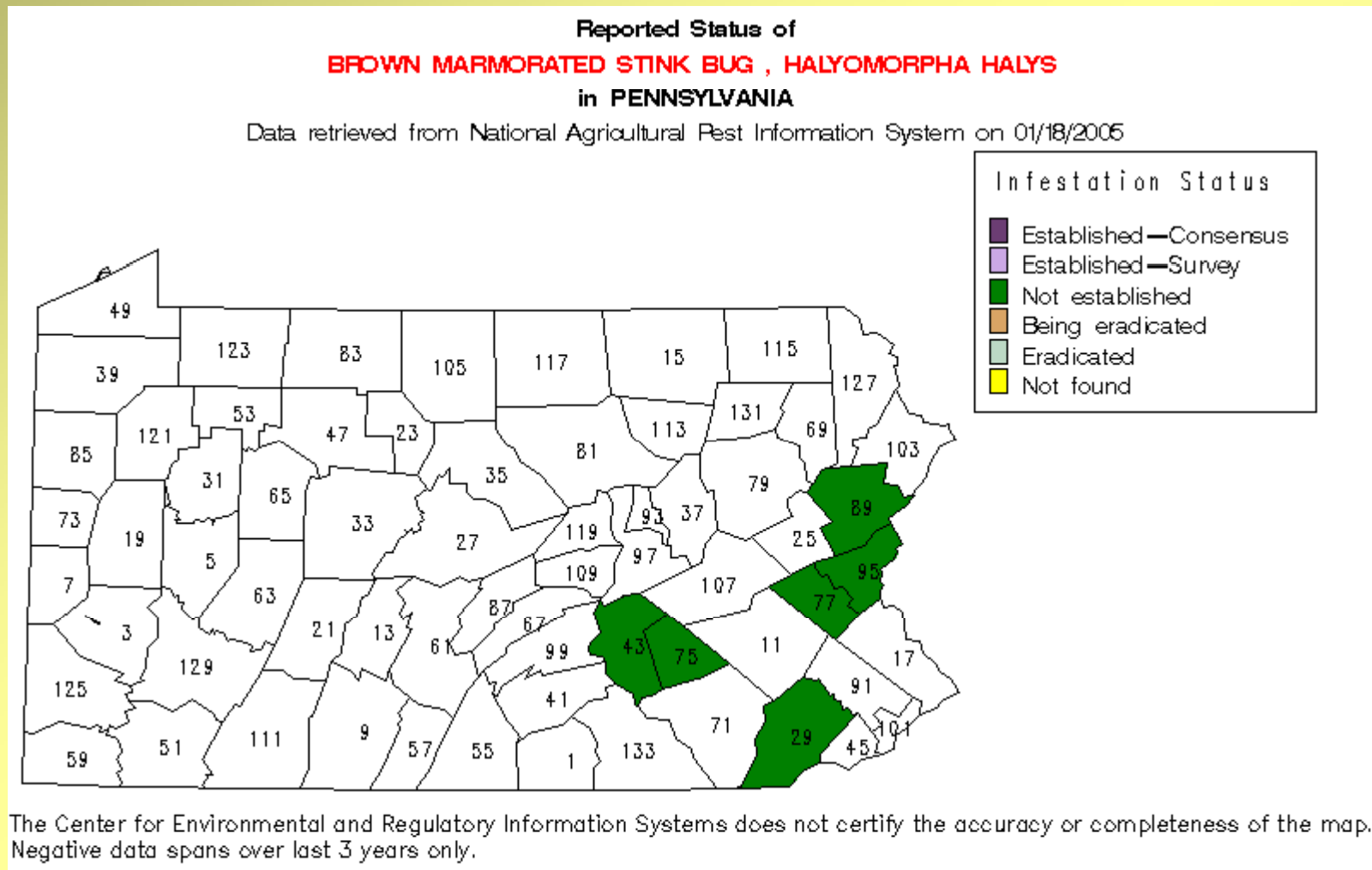


The Brown Marmorated Stink Bug, *Halyomorpha halys*: A New State Record



First report in USA - Allentown, PA in 2001 (native to SE Asia)



Brown Marmorated Stink Bug History in USA

- 2001 – 5 more counties in E. PA* &
2 counties in NJ
- 2003 – MD, SC & MN
- 2004 – WV, VA & OR
- 2005 – DE & CA
- 2007 – OH

* *Complaints were mostly from homeowners
re. over-wintering bugs indoors*

**New record
in Ohio!**

**25 Nov 2007
Columbus,
OH**

*Map courtesy of
Ohio Department
of Transportation*



Identifying the Brown Marmorated Stink Bug

Look for these unique identifying features...

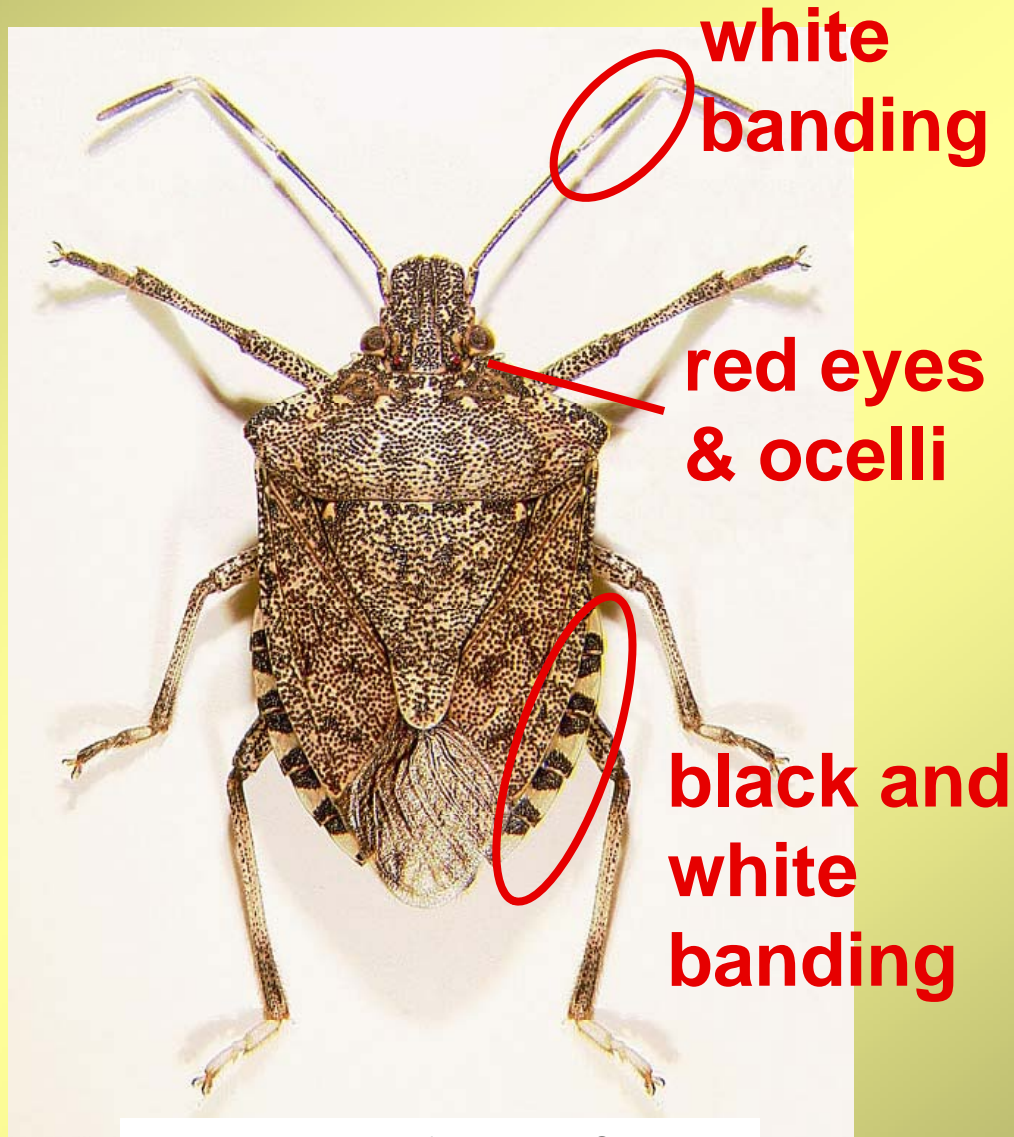


Image courtesy of David J. Shetlar
The Ohio State University

Ventral side -
light colored;
may have black or
gray markings

Legs –
brown with faint
white bands

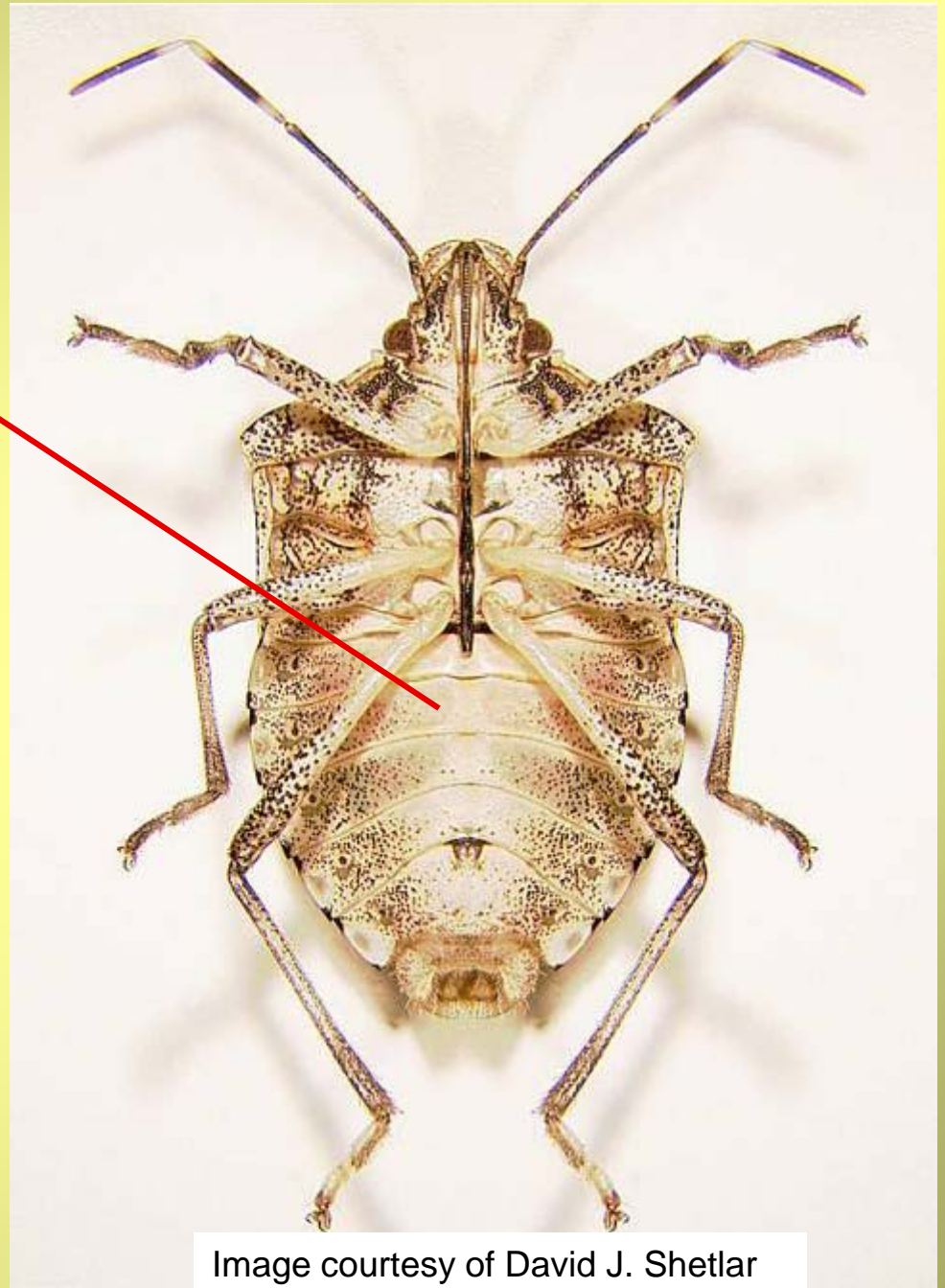


Image courtesy of David J. Shetlar
The Ohio State University



Adults - 5/8" (14 -17mm)



Life Cycle

- Adults over-winter in structures and protected sites; they emerge in April to mate.
- Females lay clusters of ~28 eggs June - Sept. (up to 400 eggs in female's lifetime).
- Nymphs undergo 5 instars, 1 week/instar. Various stages seen at one time in summer.
- 1 generation in PA, up to 5 in S. China!
- Fall temperatures chase adults indoors.



Eggs



Instar I

Photos from Rutgers University



Instar IV



Instar V

Newly hatched nymphs stay clustered near eggs.



Photo by Karen Bernhard
Pennsylvania State University

Instar I



Gary Bernon
USDA-APHIS

Deepak Matadha, Rutgers University



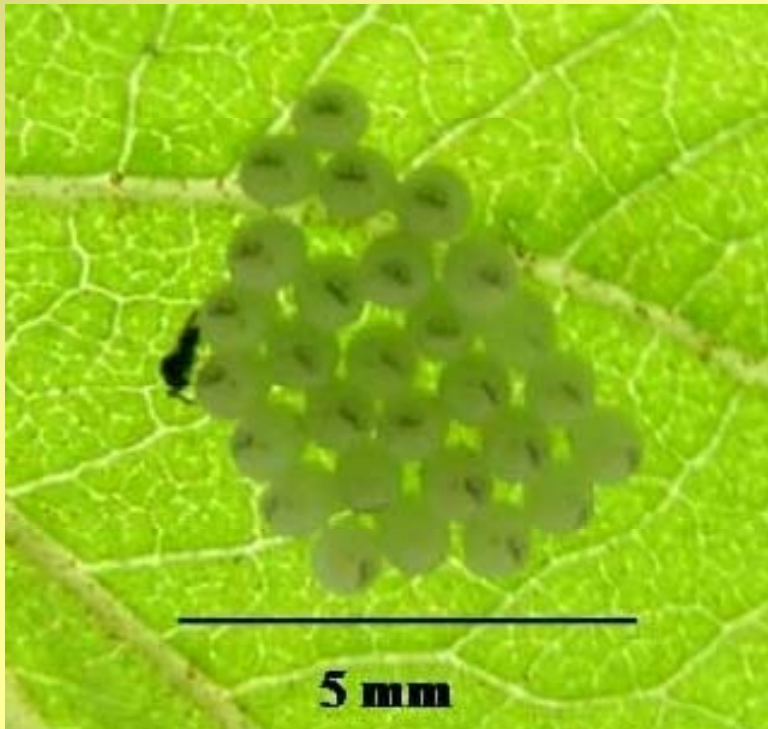
Gary Bernon
USDA-APHIS

Instar II
“tick-like”

Photographs by Gary Bernon, USDA-APHIS



Note: green stink bug nymph



Damage Potential



Gary Bernon, USDA-APHIS



Deepak Matadha
Rutgers University



Deepak Matadha
Rutgers University



Gary Bernon, USDA-APHIS

Plant Damage in China

- Fruits
 - *Pyrus* spp., *Prunus* spp., *Ficus*
 - Persimmon, Citrus
- Vegetables
- Soybeans and other beans
- Ornamentals

Plant Damage in USA

so far.....

- Fruits
 - Asian Pear, Peach, Apple, Raspberry, Grape, Apricot
 - Damage appearing in orchards and backyard gardens
- Beans
- Ornamentals
 - *Buddleia*, *Rosa* spp., Honeysuckle, *Paulownia*
- Shade trees
 - Norway Maple, Catalpa, Crabapple
- ??

Damage to fruit and leaves


- Damaged fruits un-marketable

Apples - pitting, scarring that worsens with age (confused with “cork spot”).

Peaches - punctures & catfacing

- Fruit and leaves have water-soaked lesions
- Leaves stippled or have crows-foot lesions
- Beans - immature seeds in the pod damaged
- Will switch hosts as season progresses

Here we go again....



Ohh
Nooo!!

- Like the boxelder bug, leaf-footed pine cone bug and multicolored Asian lady beetle, the BMSB will cluster in large numbers in structures.
- When smashed or perturbed, they emit a foul smell, characteristic of the insect order.
- Homeowners may be the first to “notice” these bugs and complain.

If you see a Brown Marmorated Stink Bug...

- Contact your County Extension Educator at <http://www.csrees.usda.gov/Extension/>
- Stinkbugs that are suspected to be the BMSB should be sent for positive identification. Stinkbug samples from OHIO will be processed for free at OSU; please send stinkbug samples to:

Attn: BMSB Reports
C. Wayne Ellett Plant and Pest Diagnostic Clinic
110 Kottman Hall, 2021 Coffey Road
Ohio State University
Columbus, OH 43210-1087

- DO NOT ship live insects. Please place dead insects in a leak-proof, crush-proof container (e.g., plastic medicine bottle or film canister).
- Additional details regarding submitting insect specimens are available at: <http://ohioline.osu.edu/hyg-fact/2000/2121.html> or <http://ppdc.osu.edu/>

If you see a Brown Marmorated Stink Bug...

- You also can go to...

<https://njaes.rutgers.edu/stinkbug/report.asp>

- If you capture a stink bug specimen, you can send it to:

Attn: BMSB Reports

Department of Entomology

Rutgers, The State University of New Jersey

93 Lipman Drive

New Brunswick, NJ 08901-8524

- **Please place dead specimens in a leak-proof, crush-proof container (e.g., plastic medicine bottle or film canister).**

Websites with information

- Purdue University:
<http://ceris.purdue.edu/napis/news/update05.html>
- Rutgers, The State University of New Jersey:
<http://njaes.rutgers.edu/stinkbug/>
- NE IPM Center:
http://ncipmc.org/alerts/stinkbug_alert.pdf
- University of Florida:
http://creatures.ifas.ufl.edu/veg/bean/brown_marmorated_stink_bug.htm
- Massachusetts:
<http://www.massnrc.org/pests/pestFAQsheets/brownmarmoratedstinkbug.html>

Websites with information

- University of Maryland:
<http://www.hgic.umd.edu/content/brownstinkbug.cfm>
- Pennsylvania State University:
<http://www.ento.psu.edu/extension/factsheets/brownMarmoratedstinkbug.htm>
- Oregon State University:
<http://oregonstate.edu/dept/nurspest/Brownmarmstinkbug.htm>
- USDA Forest Service + Bugwood:
<http://www.forestryimages.org/>
- National Plant Diagnostic Network:
<http://www.npdn.org>
- Ohio State University:
HYG Fact Sheet <http://ohioline.osu.edu>

Acknowledgements

Editorial Review

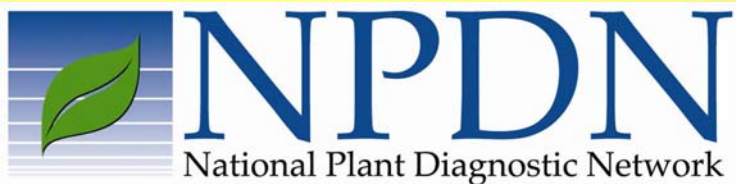
- David J. Shetlar & Ron Hammond (Ohio State University, Entomology)
- Anne Nielsen (Rutgers Univ., Entomology) & Gary Bernon (USDA-APHIS) for information and images.
- Deepak Matadha (Rutgers Univ.), Karen Bernhard (Penn State Univ.), David J. Shetlar (OSU), Univ. Florida & USDA for images.
- Amy Miller (OSU, Entomology) for technical assistance.

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Publication Details

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- **Publication Number: 0026**
- **Publication Date: January 2008**