

# Status of BMSB in the Mid-Atlantic U.S.

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*Funding*

 **USDA** United States Department of Agriculture National Institute of Food and Agriculture  
Specialty Crop Research Initiative

*Collaborating Institutions*

 **OSU** Oregon State University  **NC STATE UNIVERSITY**  **PennState**

 **UNIVERSITY OF MARYLAND**  **UNIVERSITY OF GEORGIA**

 **WASHINGTON STATE UNIVERSITY**  **UtahStateUniversity.**

 **Northeastern IPM Center**  **Cornell University**  **University of Kentucky.**

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# Mid-Atlantic BMSB Researchers



Tracy Leskey (Kearneysville), Don Weber (Beltsville), Kim Hoelmer (Newark)



Tom Kuhar & Chris Bergh



Anne Nielsen and George Hamilton



Greg Krawczyk, Jayson Harper



Paula Shrewsbury, Cerruti Hooks

# BMSB in the Mid-Atlantic U.S.

- As we all know, 1st detected in Allentown, PA in the mid 1990s



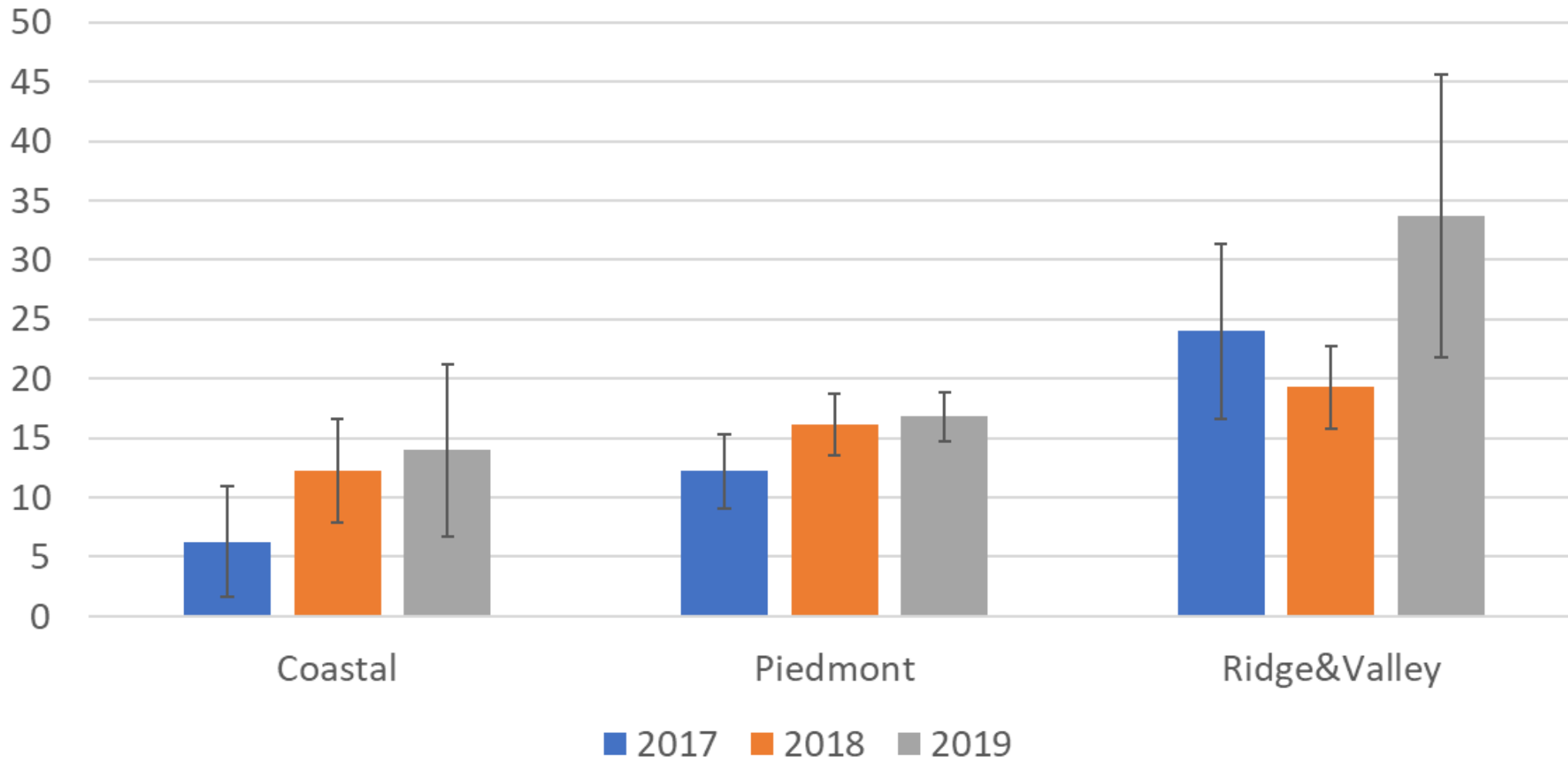
Hoebeker, E. R. & M. E. Carter. 2003. *Halyomorpha halys* (Stål) (Heteroptera: Pentatomidae): A polyphagous plant pest from Asia newly detected in North America. Proc. Entomol. Soc. Wash. 105(1):225-237.

# Mid-Atlantic summary for 2019

- BMSB densities were generally moderate (normal) across the Mid-Atlantic U.S. in 2019 with a notable late-season spike in adult numbers at several (higher elevation) locations going into the fall.

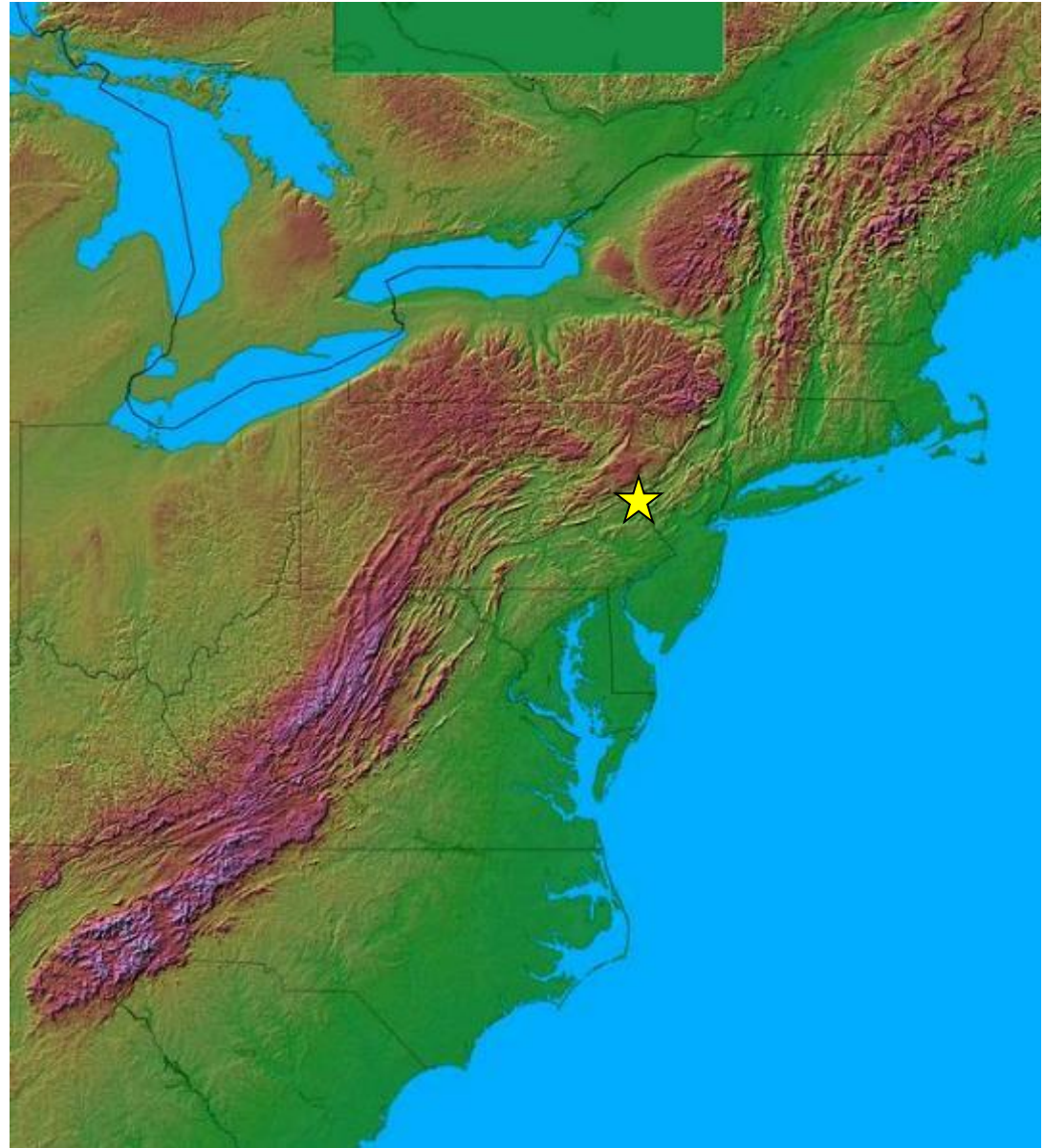


Peak adult BMSB catch (per trap per wk) in the Mid-Atlantic U.S.  
(based on 25 locations)



# BMSB in the Mid-Atlantic U.S.

- BMSB densities are highest in the Appalachian ridge & valleys & lowest in the lower Coastal elevations



# Occurrence of Brown Marmorated Stink Bug (Hemiptera: Pentatomidae) on Wild Hosts in Nonmanaged Woodlands and Soybean Fields in North Carolina and Virginia

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J. F. WALGENBACH<sup>1,7</sup>

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Environ. Entomol. 44(4): 1011–1021 (2015); DOI: 10.1093/ee/nvv092



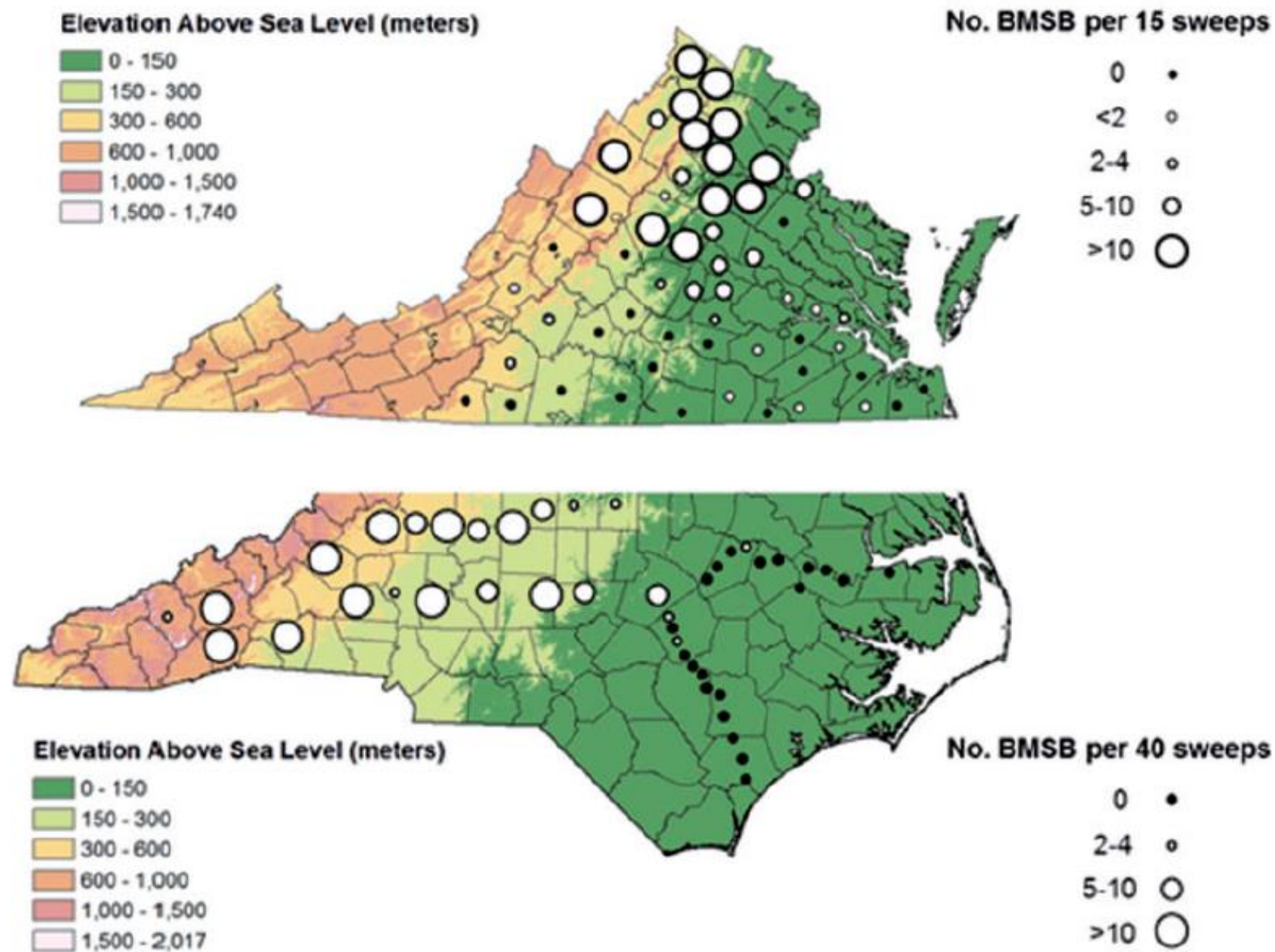
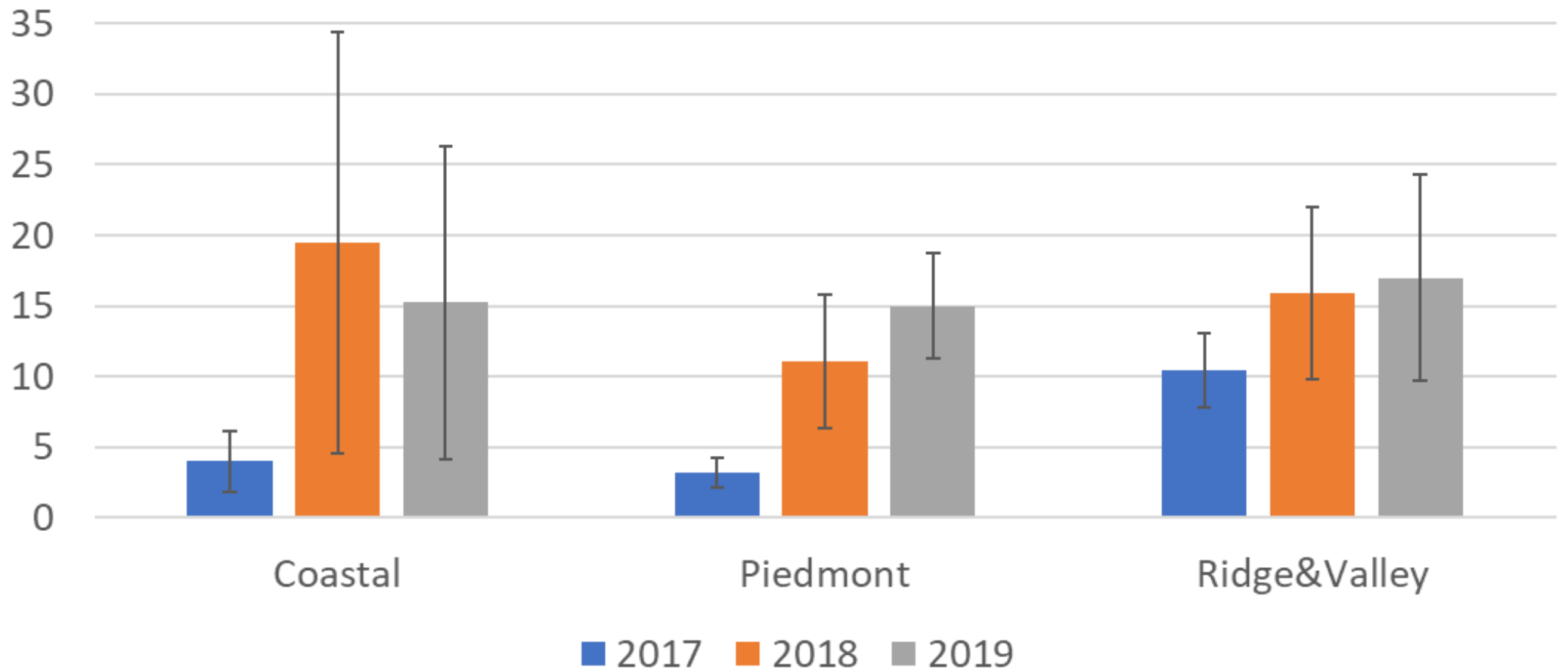


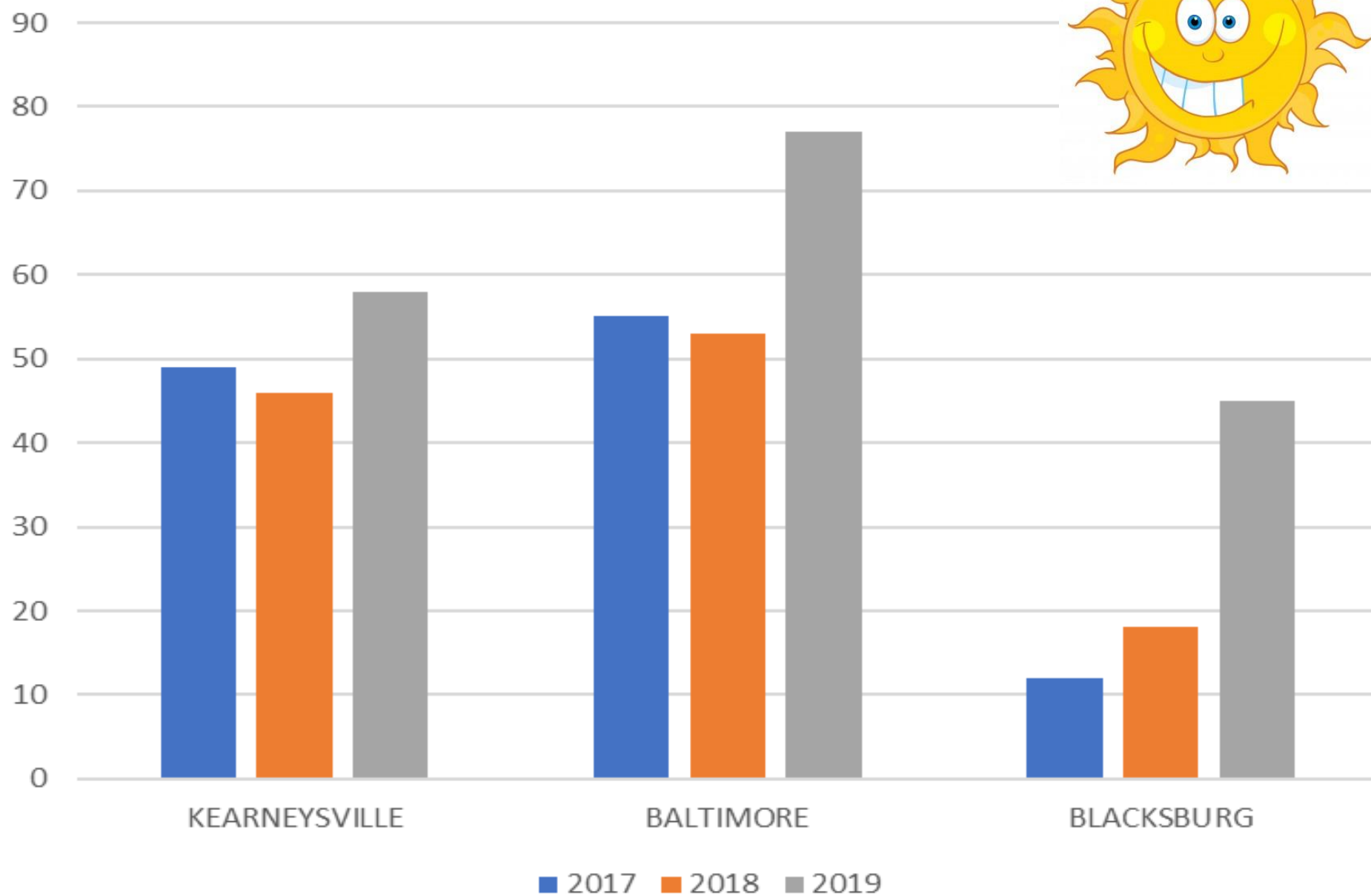
Fig. 1. Density of *H. halys* in soybean fields in 2013 in VA and 2014 in NC. Densities in individual fields are depicted by the size and color of data points. Data from VA represent the highest density recorded from multiple sample dates, while NC data represent densities on a single sample date.



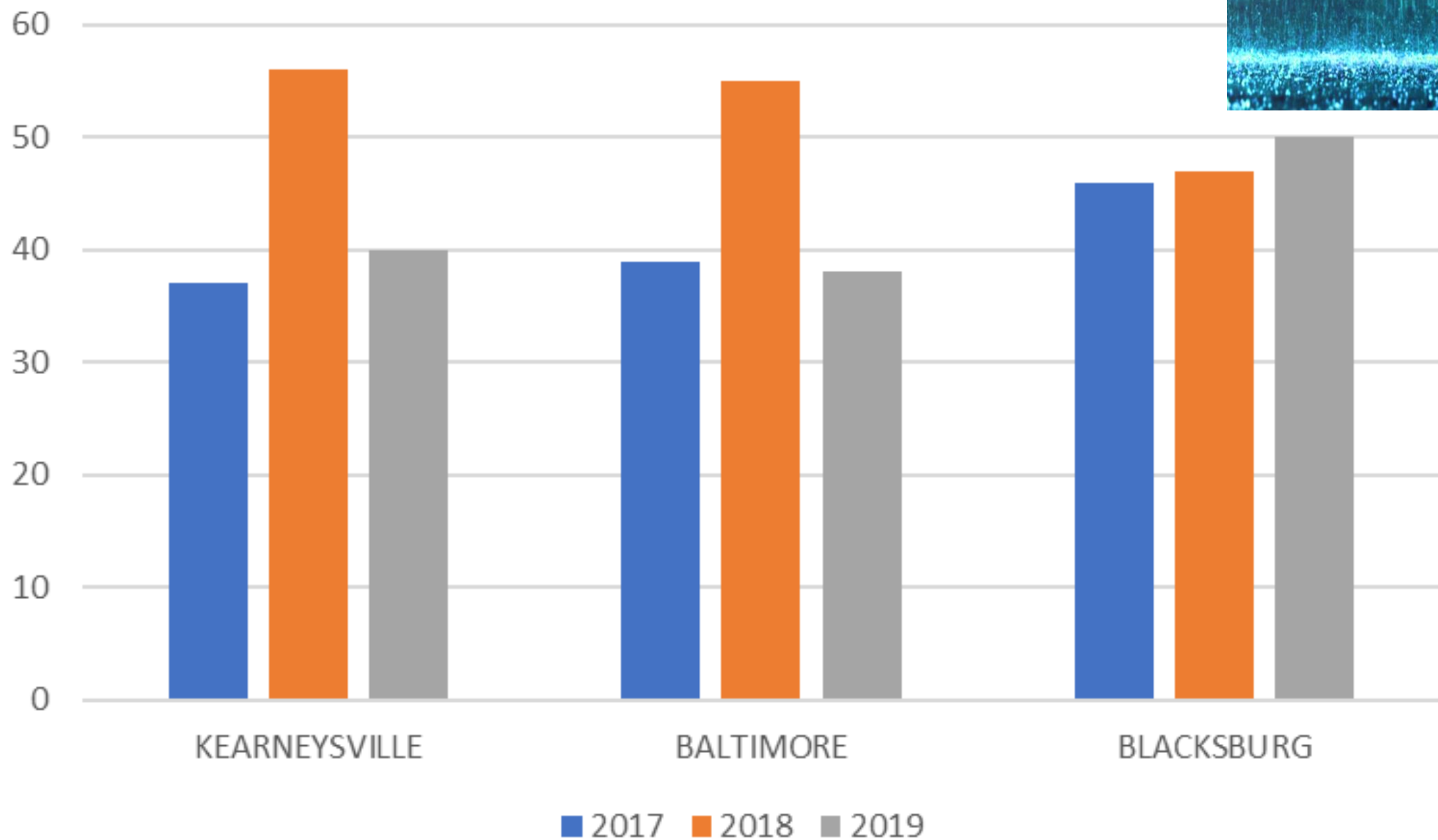
Peak BMSB nymphal catch (per trap per wk) in the Mid-Atlantic U.S.  
(based on 25 locations)



# days that temp. > 30°C (=86°F)



# # days (from June - Oct) with precipitation



## Some other notable comments from the history of BMSB in the Mid-Atlantic

- BMSB populations blew up and caught everyone by surprise in the mid-Atlantic in 2009 and 2010
- BMSB pest densities have not generally reached that level since
- Growers (tree fruit, vegetable) know how to recognize and manage the pest better today
- The parasitoid *T. japonicus* is spreading and other natural forces may be regulating this insect

# Some other notable comments from the history of BMSB in the Mid-Atlantic

- Organic growers have the biggest issues (lack of effective control tools)
- BMSB is still a border driven pest

