



Brown Marmorated Stink Bug Project Communications Review November 2016



United States
Department of
Agriculture

National Institute
of Food and
Agriculture

Communications Overview

- * We developed original materials for
 1. Print
 2. Web
 3. Video
 4. E-mail
 5. News
 6. Social media

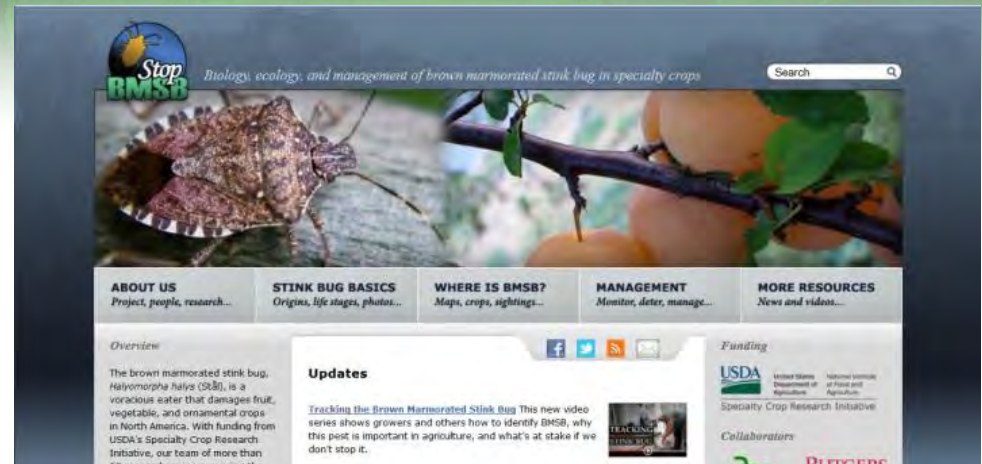
Outreach Capacity of the Northeastern IPM Center

- * Website StopBMSB.org with **57,141** unique visitors in past year
- * **3,200** stakeholders on Center e-mail list
- * **375** recipients on BMSB e-mail lists
- * **4,500** national addresses receive print
- * Facebook: **368** likes
- * Twitter: **1,318** followers / **255** tweets (past year)
- * YouTube (over **37,500** minutes watched in past year, **9,295** views in past year, **73** subscribers)
- * Flipboard (**410** viewers, **61** followers)
- * Pinterest

Website

StopBMSB.org

- * Widely used and cited interactive map
- * Comprehensive and up-to-date list of host plants
- * Basic info about bug
- * News reports
- * Videos
- * Spanish
- * 57,000 visitors in a year



Stink Bug ID Kit



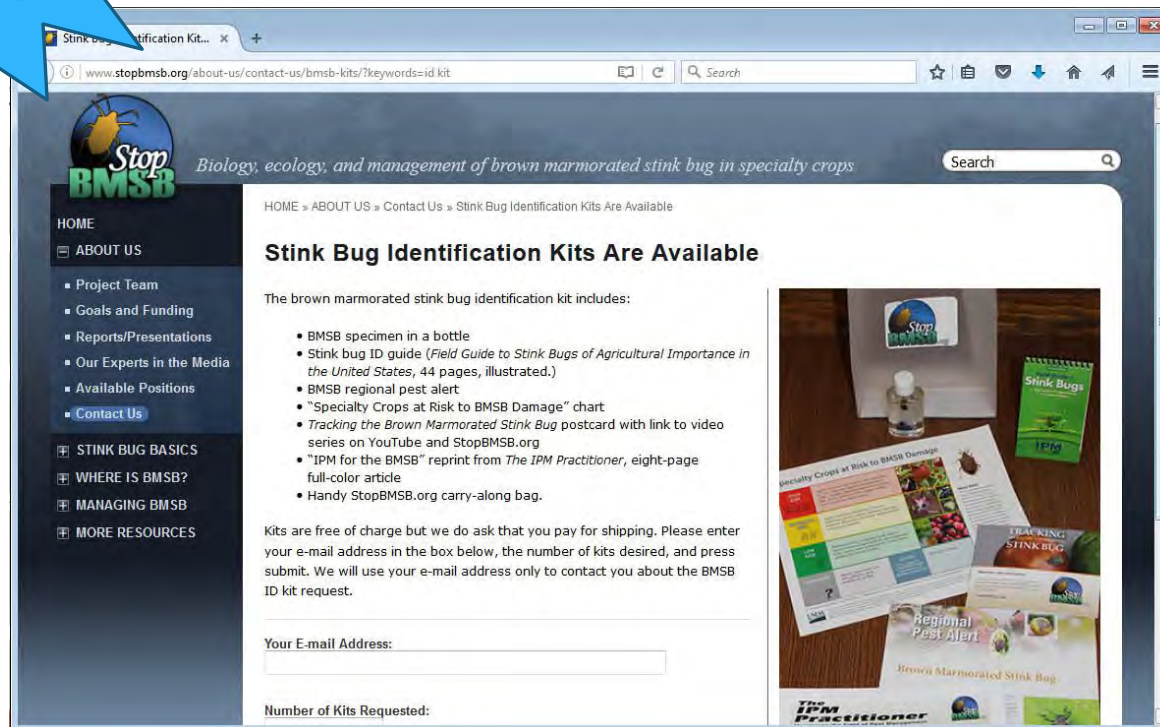
Video postcard, ID specimen, Stink Bug guide, article, factsheet, crops at risk flyer

Stink Bug in a Bottle



Order ID Kit and Social Media Landing Page

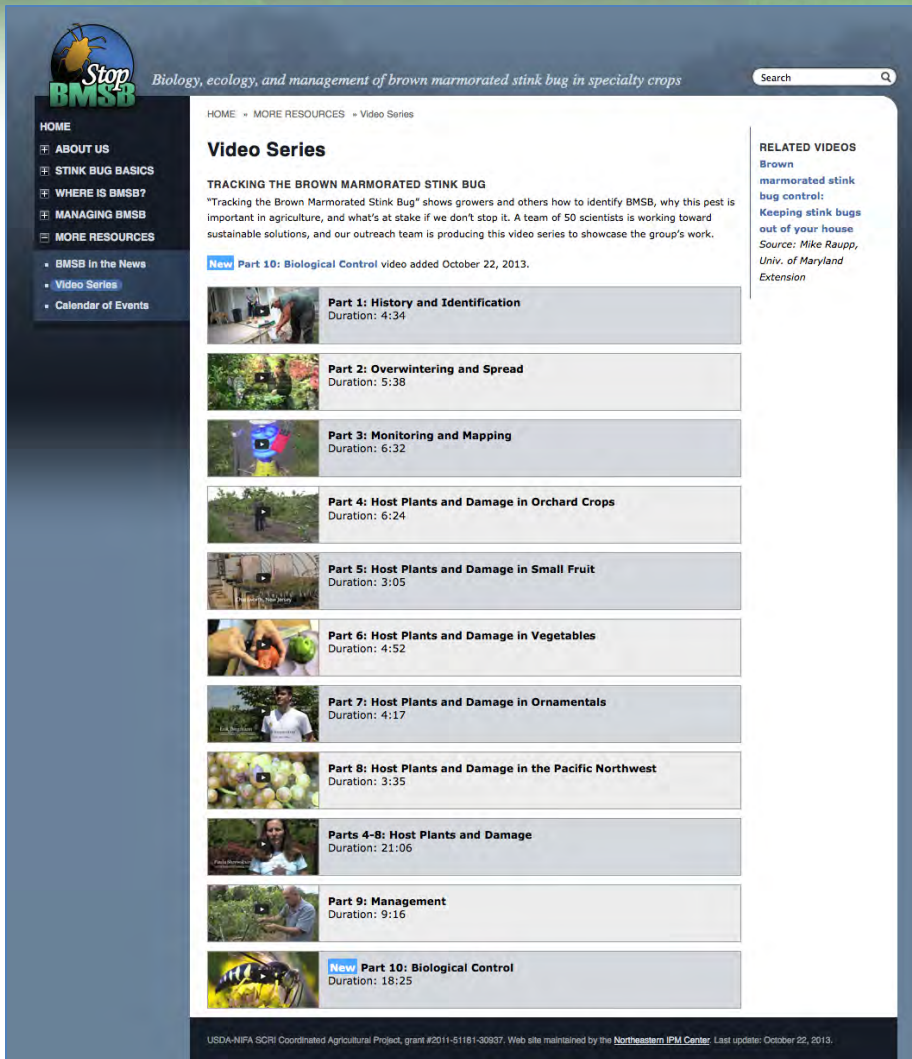
NEW!



The screenshot shows a web browser window displaying the StopBMSB.org website. The page title is "Stink Bug Identification Kits Are Available". The URL in the address bar is "www.stopbmsb.org/about-us/contact-us/bmsb-kits/?keywords=id kit". The website header includes the StopBMSB logo and the tagline "Biology, ecology, and management of brown marmorated stink bug in specialty crops". A search bar is located in the top right corner. The main content area features a navigation menu on the left with categories like "HOME", "ABOUT US", "STINK BUG BASICS", "WHERE IS BMSB?", "MANAGING BMSB", and "MORE RESOURCES". The main content area has a breadcrumb trail: "HOME » ABOUT US » Contact Us » Stink Bug Identification Kits Are Available". The main heading is "Stink Bug Identification Kits Are Available". Below this, it states "The brown marmorated stink bug identification kit includes:" followed by a bulleted list of items: BMSB specimen in a bottle, Stink bug ID guide (Field Guide to Stink Bugs of Agricultural Importance in the United States, 44 pages, illustrated.), BMSB regional pest alert, "Specialty Crops at Risk to BMSB Damage" chart, Tracking the Brown Marmorated Stink Bug postcard with link to video series on YouTube and StopBMSB.org, "IPM for the BMSB" reprint from The IPM Practitioner, eight-page full-color article, and Handy StopBMSB.org carry-along bag. Below the list, it says "Kits are free of charge but we do ask that you pay for shipping. Please enter your e-mail address in the box below, the number of kits desired, and press submit. We will use your e-mail address only to contact you about the BMSB ID kit request." There are two input fields: "Your E-mail Address:" and "Number of Kits Requested:". On the right side of the page, there is a photograph of the identification kit components, including a bottle, a guide, a pest alert, a chart, a postcard, and a carry-along bag.

Tracking the Brown Marmorated Stink Bug Video Series

45,886
lifetime views



The screenshot shows the website for "Stop BMSB" (Biology, ecology, and management of brown marmorated stink bug in specialty crops). The page features a navigation menu on the left with categories like "ABOUT US", "STINK BUG BASICS", "WHERE IS BMSB?", "MANAGING BMSB", and "MORE RESOURCES". The main content area is titled "Video Series" and lists ten parts of the series, each with a thumbnail and duration. The parts are: Part 1: History and Identification (4:34), Part 2: Overwintering and Spread (5:38), Part 3: Monitoring and Mapping (6:32), Part 4: Host Plants and Damage in Orchard Crops (6:24), Part 5: Host Plants and Damage in Small Fruit (3:05), Part 6: Host Plants and Damage in Vegetables (4:52), Part 7: Host Plants and Damage in Ornamentals (4:17), Part 8: Host Plants and Damage in the Pacific Northwest (3:35), Part 4-8: Host Plants and Damage (21:06), and Part 9: Management (9:16). A "New" badge is next to Part 10: Biological Control (18:25). A search bar is located at the top right of the page.

Ten-part video series:

www.StopBMSB.org/video

Our YouTube channel saw 13,855 views in past year

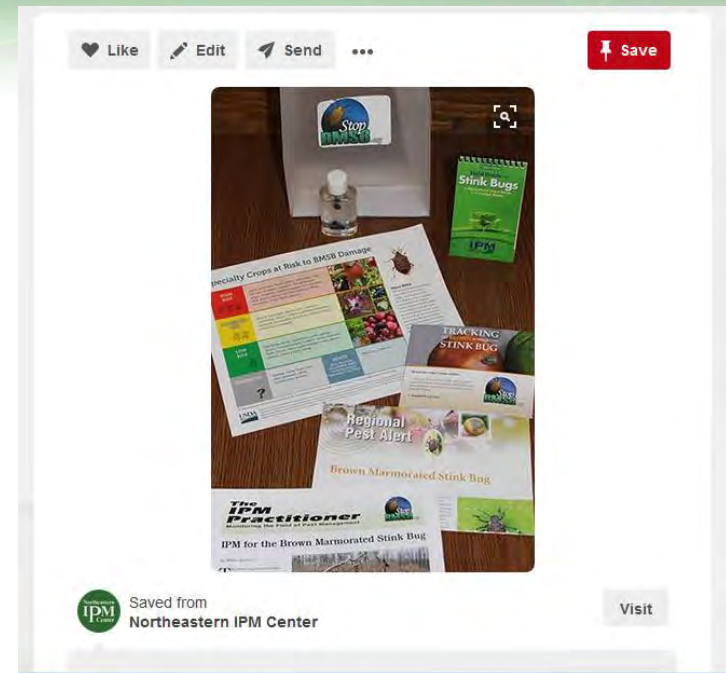
[One-Minute Trailer on YouTube](#)



Pinterest Test Campaign

Pinterest

- Spent \$200
- Earned 32,000 impressions
- 480 engagements
- In two weeks, received 18 requests for 35 ID kits
- Also running print ads simultaneously



Guidance Documents

- Grapes
- Orchard Crops
- Small Fruit
- Vegetables
- In English and Spanish
- 18,000 documents printed and sent to distributors nationally

Integrated Pest Management for Brown Marmorated Stink Bug in Small Fruit

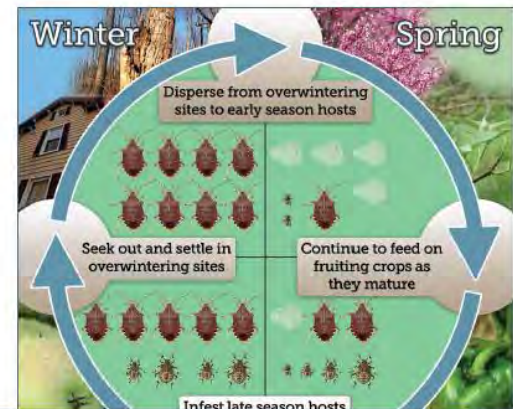
A synopsis of what researchers have learned so far and management recommendations using an integrated approach

Authored by the BMSB SCRI CAP Small Fruit Commodity Team:

Nik Wiman and Vaughn Walton (Oregon State University), Cesar Rodriguez-Saona (Rutgers University), Doug Pfeiffer (Virginia Tech), William R. Morrison III and Tracy C. Leskey (USDA-ARS)

Basic Biology and Life Cycle of BMSB

- In addition to being a conspicuous household nuisance pest in the winter and spring, brown marmorated stink bug (BMSB) is a serious agricultural pest of numerous crops during the growing season, including small fruit crops.
- After emerging from shelters in late spring, BMSB adults begin mating and laying eggs on various trees and host plants in late May and June (Fig. 1).
- In most of its range in North America, BMSB completes one to two generations per year, progressing through an egg stage and 5 nymphal instars before molting into an adult (Fig. 2).



Small Fruit Crops at Risk / Crops Not at Risk

SCRI CAP 2011-2016

The SCRI CAP (Specialty Crop Research Initiative Coordinated Agricultural Project) from 2011-2016 developed

- Basic biological and ecological information about bug

 - Identifying its host range

 - Unlocking secrets of its aggregation pheromone

 - Developing monitoring traps

 - Identifying key Asian and native natural enemies

- Chemical control strategies

Chemical control = short-term relief = good

- However, affects non-targets

- Leads to secondary pest outbreaks

BMSB₂

Project Title: Management of BMSB in US Specialty Crops

- Builds on previous findings

- Focus on sustainable, long-term management

- Increase our understanding of risk to crops

- Implement widespread biological control for BMSB

 - Release permit for *Trissolcus japonicus* pending

 - The parasitoid wasp already present in MD, DC, VA, and Vancouver, WA

 - Mass rearing methods for the wasp needed

- Understanding landscape factors, or in other words,

- landscape-scale control techniques; attract-and-kill strategies could be an option

BMSB2 Outreach

- Deliver science-based information
- BMSB1: >300 presentations, >30,000 stakeholder contacts, StopBMSB.org > 125,000 unique visitors, video series on YouTube > 34,000 views.
- BMSB2: What's new
 - Inspire next generation of IPM experts
 - Build upon existing resources and add new ones over time
 - Evaluate social benefits
 - Aim to reach 55,000 unique visitors
- New project is national in scope (added partners from Midwest, Southeast, and recruited an increased number of participants from West and Northwest US)
- \$23 billion worth of specialty crops at risk

Objectives

Objective 1: Landscape ecology - Predicting where and under what conditions BMSB could become established

Objective 2: Biological control – widespread biological control of BMSB, release of parasitoid wasp *Trissolcus japonicus*, understanding release factors and rearing techniques

Objective 3: Decision tool/management tactics – Evaluate landscape risk factors and produce decision tools, develop best management practices (BMPs)

Objective 4: Economics – Assess potential economic harm and evaluate value saved by management tools and tactics

Objective 5: Outreach – Deliver science-based information. Survey stakeholder needs and deliver crop-specific information. Inspire the next generation of pest experts.

Near-term Changes for Website

- New title, objectives, purpose, names of participants, and participating institution logos throughout website
- Collect reports and presentations from BMSB1 in one place, create a new place for reports and presentations from BMSB2
- Collect older news stories, create place for new news stories

Northeastern
IPM
Center

Thank You