

PENNSYLVANIA PRACTICAL EXPERIENCE WITH BMSB MONITORING



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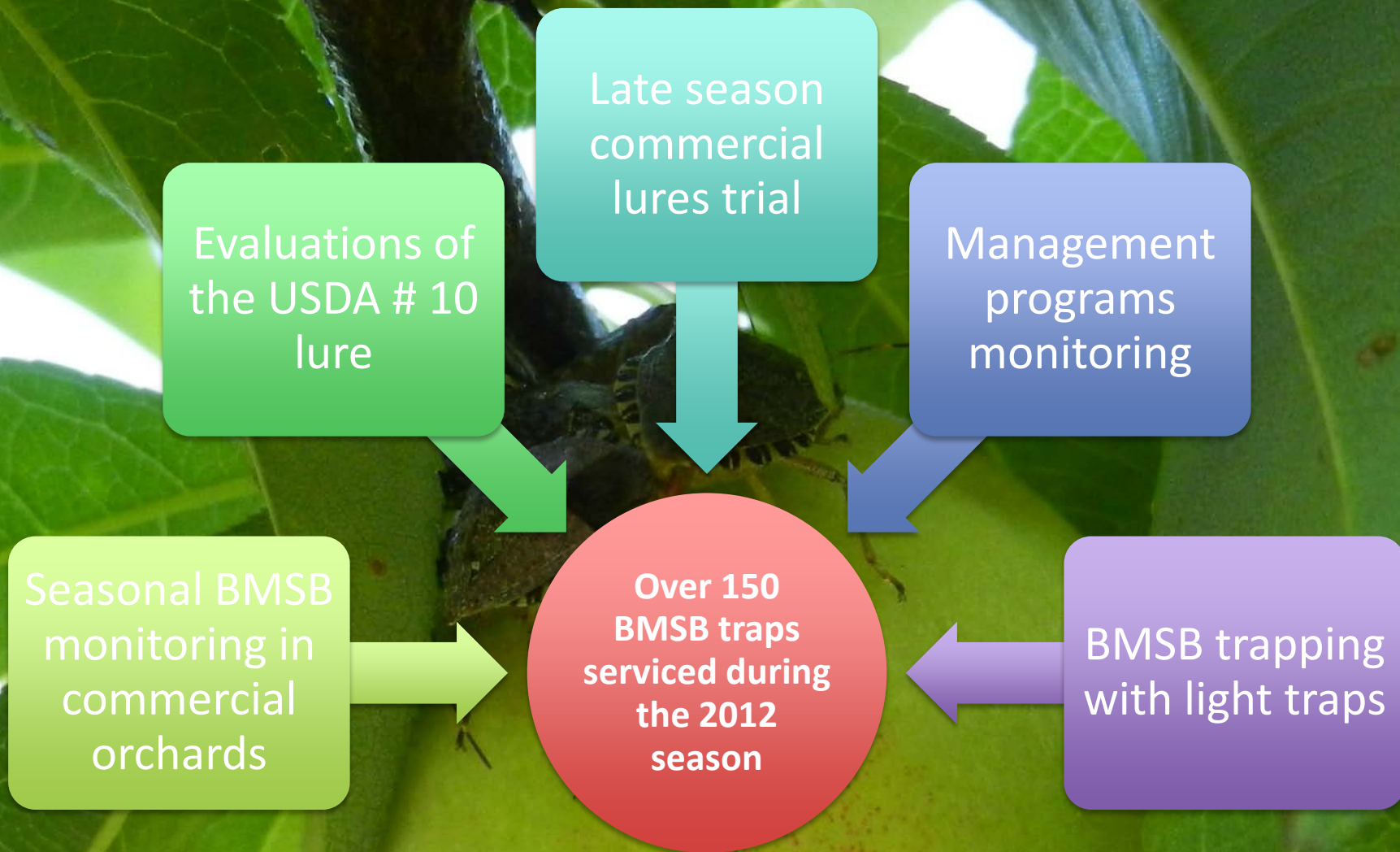


PENNSTATE



College of Agricultural Sciences





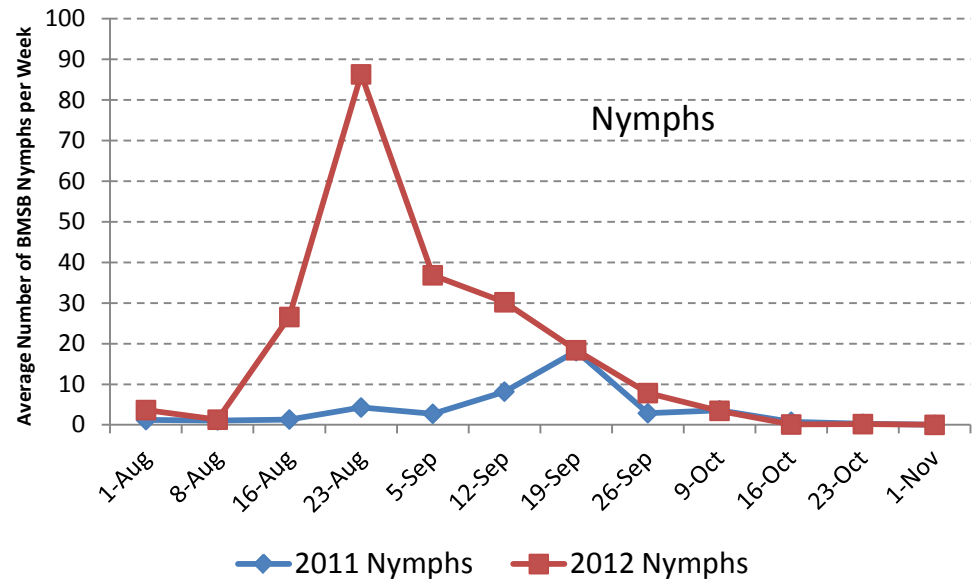
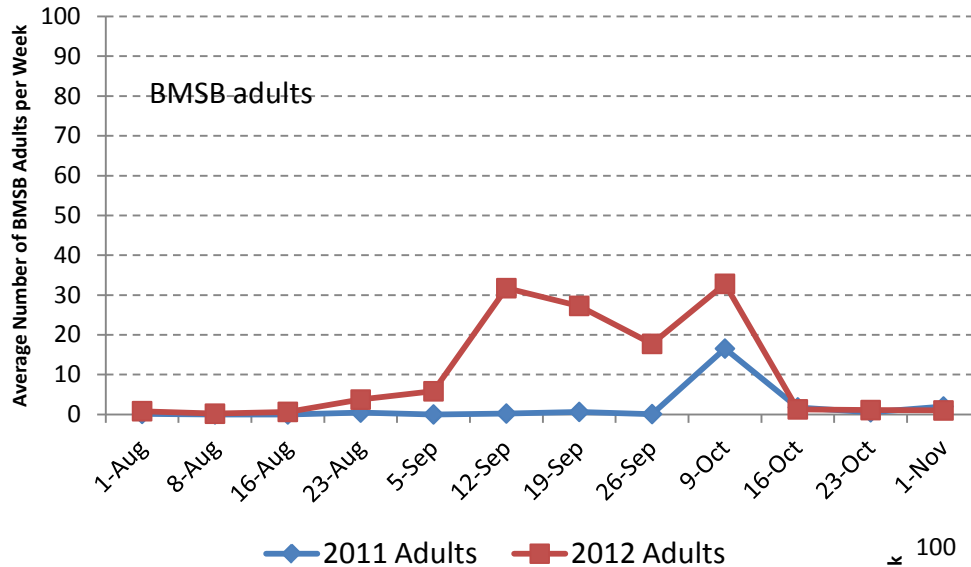
Traps – 10 plus traps designs

Lures – 7 different BMSB lures plus light traps

2011 versus 2012 season

Average number of BMSB adults and nymphs per trap/week

Lancaster County, PA Orchard

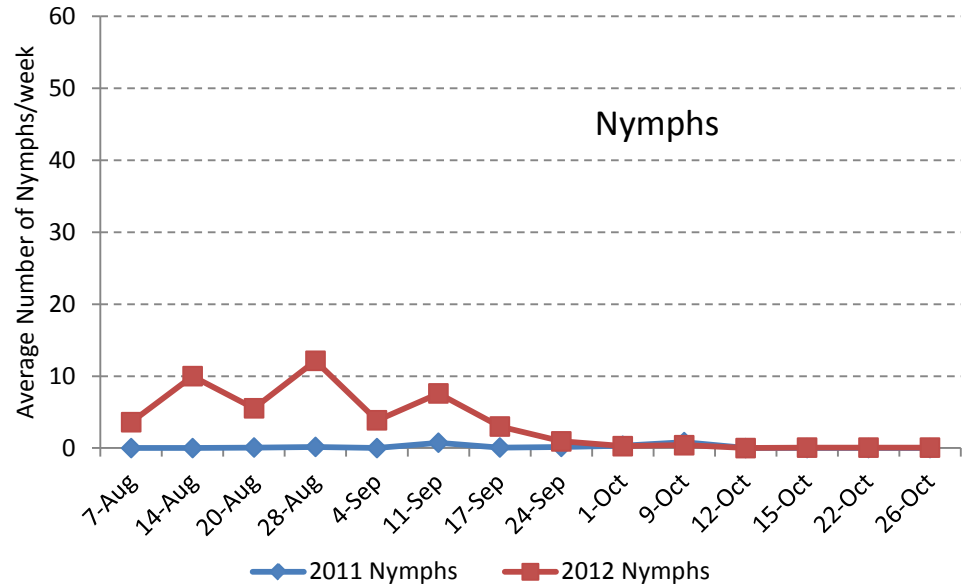
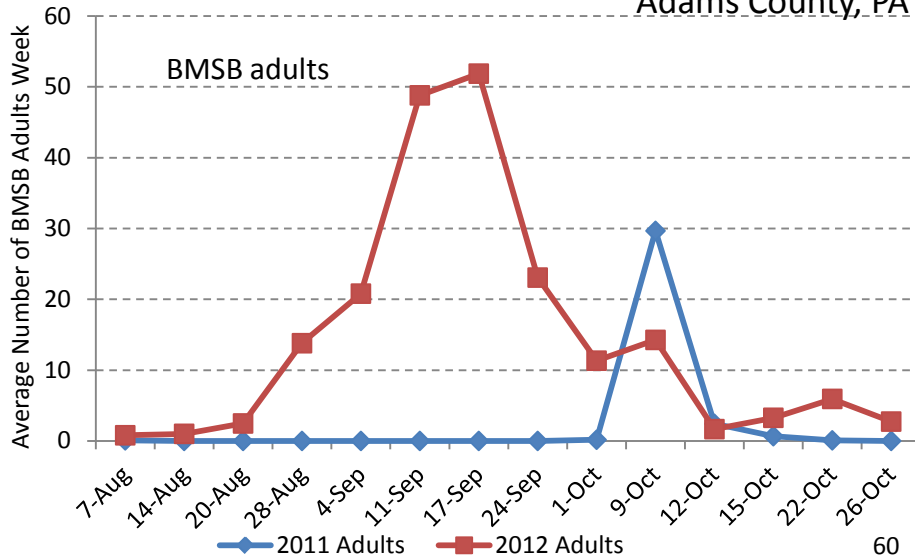


2011 and 2012 trapping data collected using commercially available [Ag-Bio](#) traps and lures

2011 versus 2012 season

Average number of BMSB adults and nymphs per trap/week

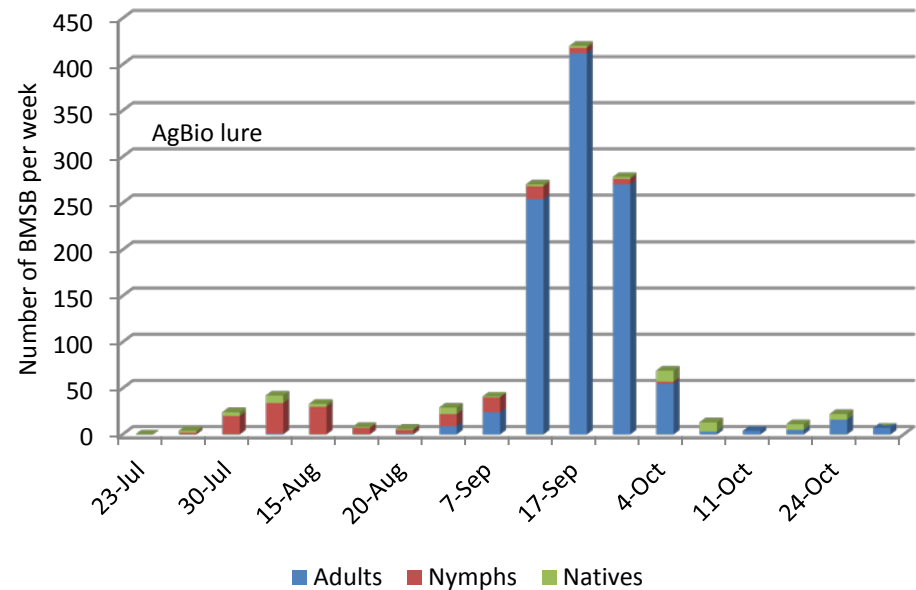
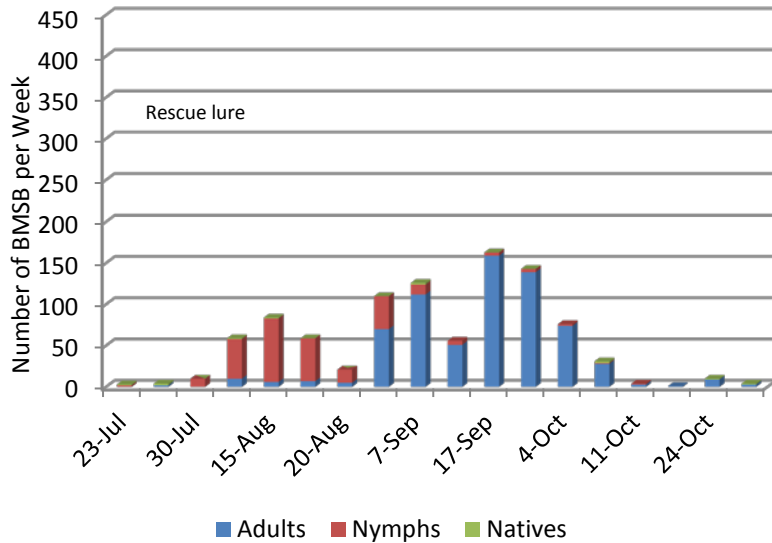
Adams County, PA Orchard



2011 and 2012 trapping data collected using commercially available Ag-Bio traps and lures

Comparison of commercial lures available during the 2012 season

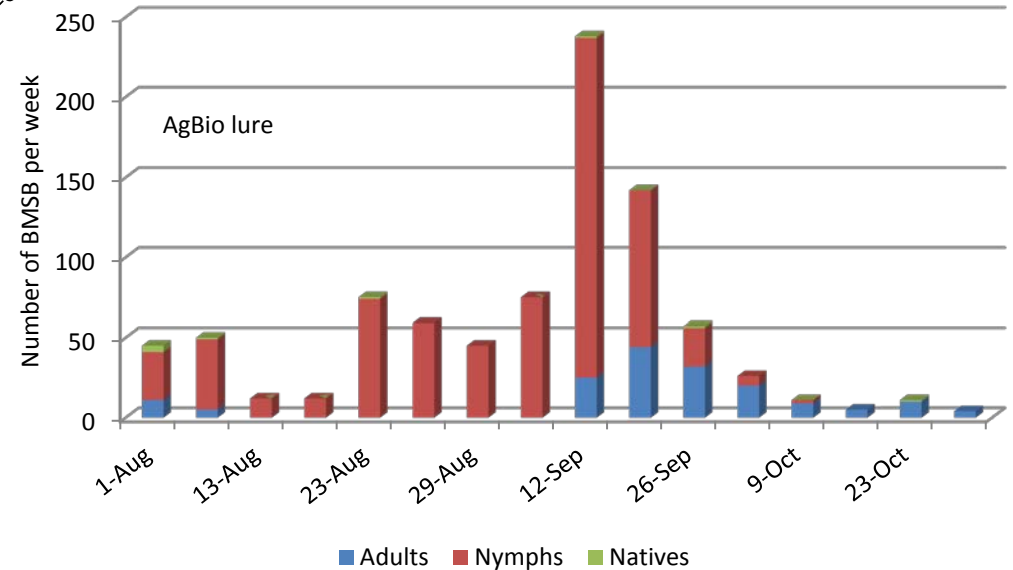
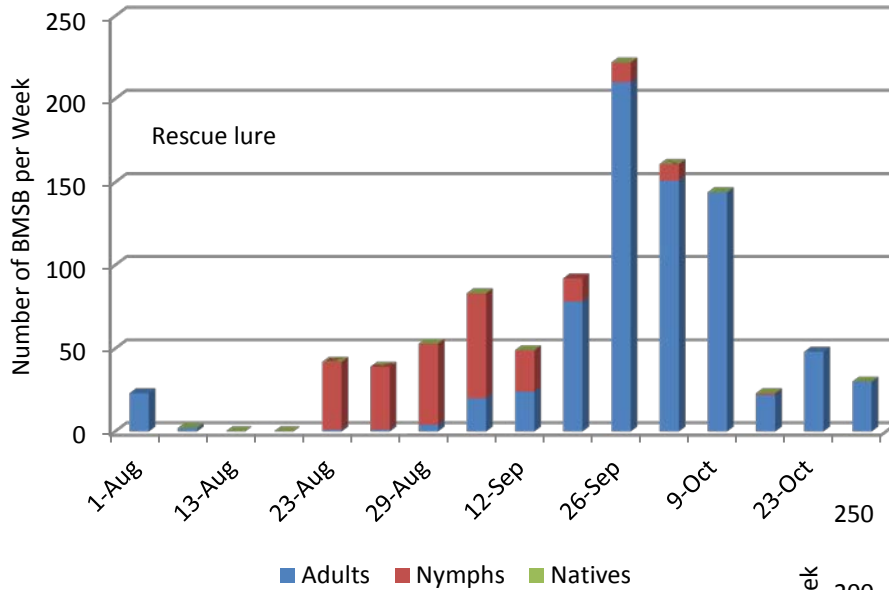
Adams County, PA 2012



Total captures of BMSB instars in five traps per treatment located side by side (50 m apart) in commercial apple orchard.

Comparison of commercial lures available during the 2012 season

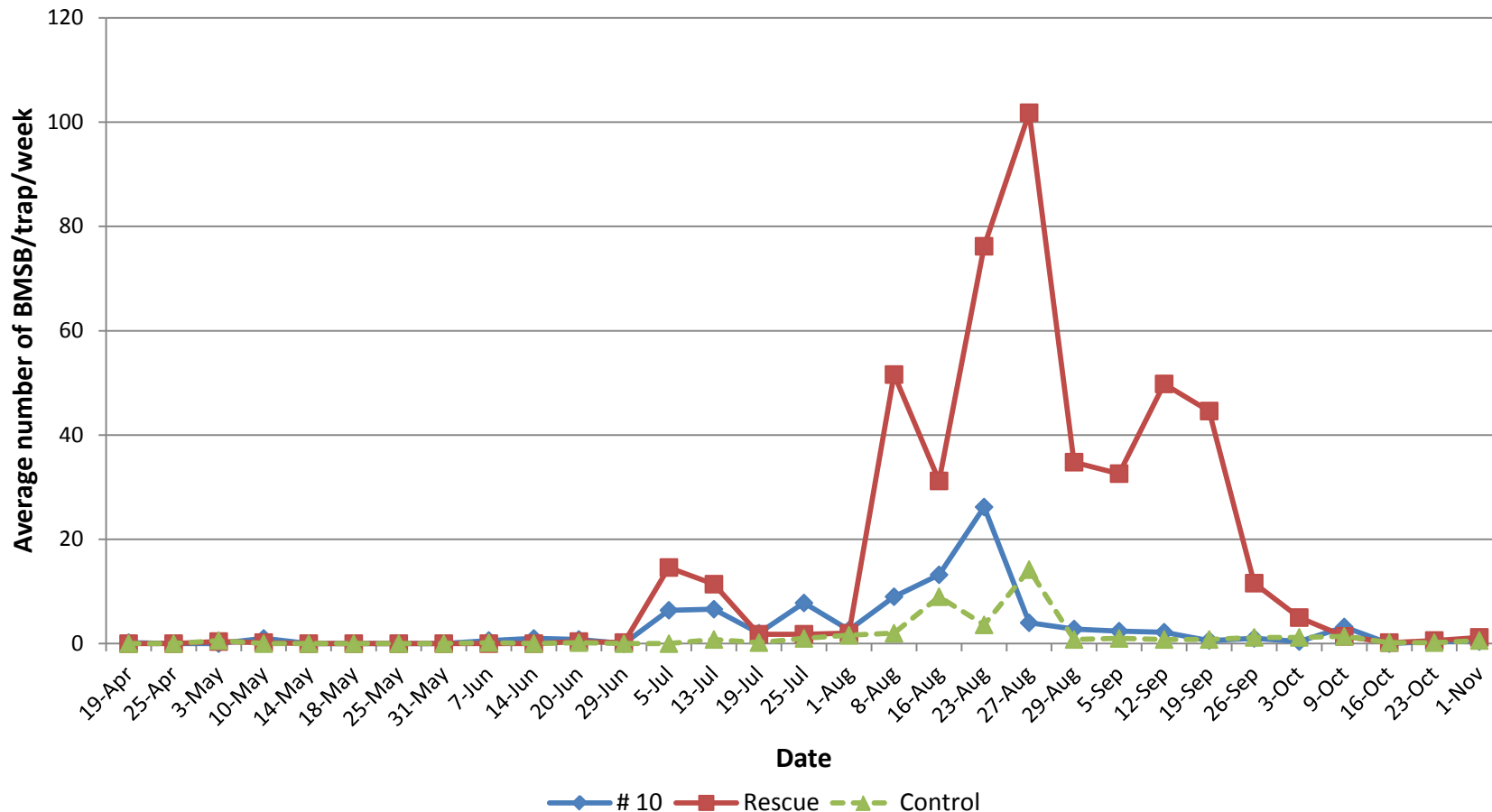
Lancaster County, PA 2012



Total captures of BMSB instars in five traps per treatment located side by side (50 m apart) in commercial apple orchard.

Seasonal field evaluation of #10 BMSB lure

Lancaster County, PA. 2012 season

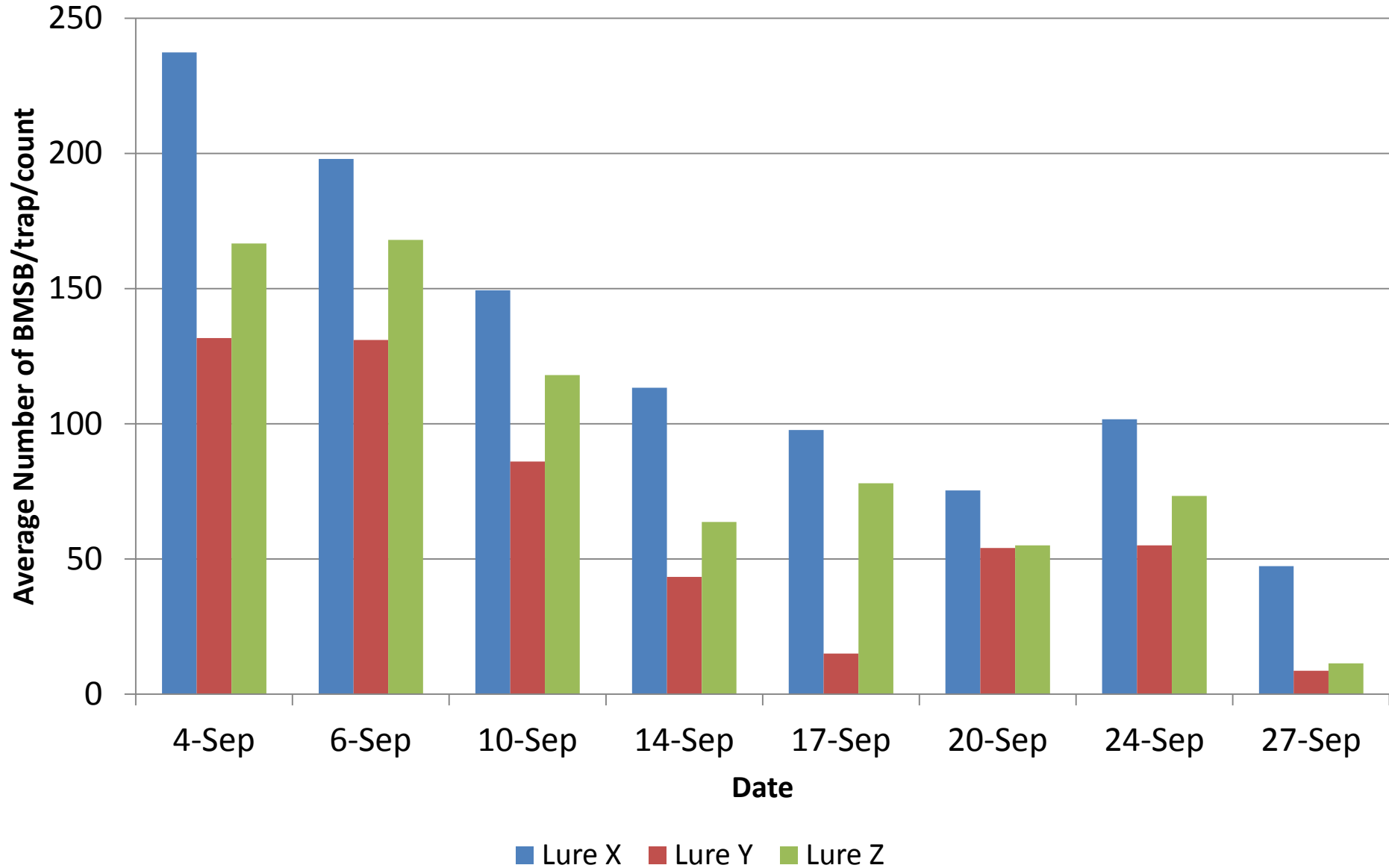


Site #1. Five traps per treatment, traps rotated weekly, placed on edge of woods, next to commercial orchard

BMSB new commercial lures comparison,

Late season BMSB captures

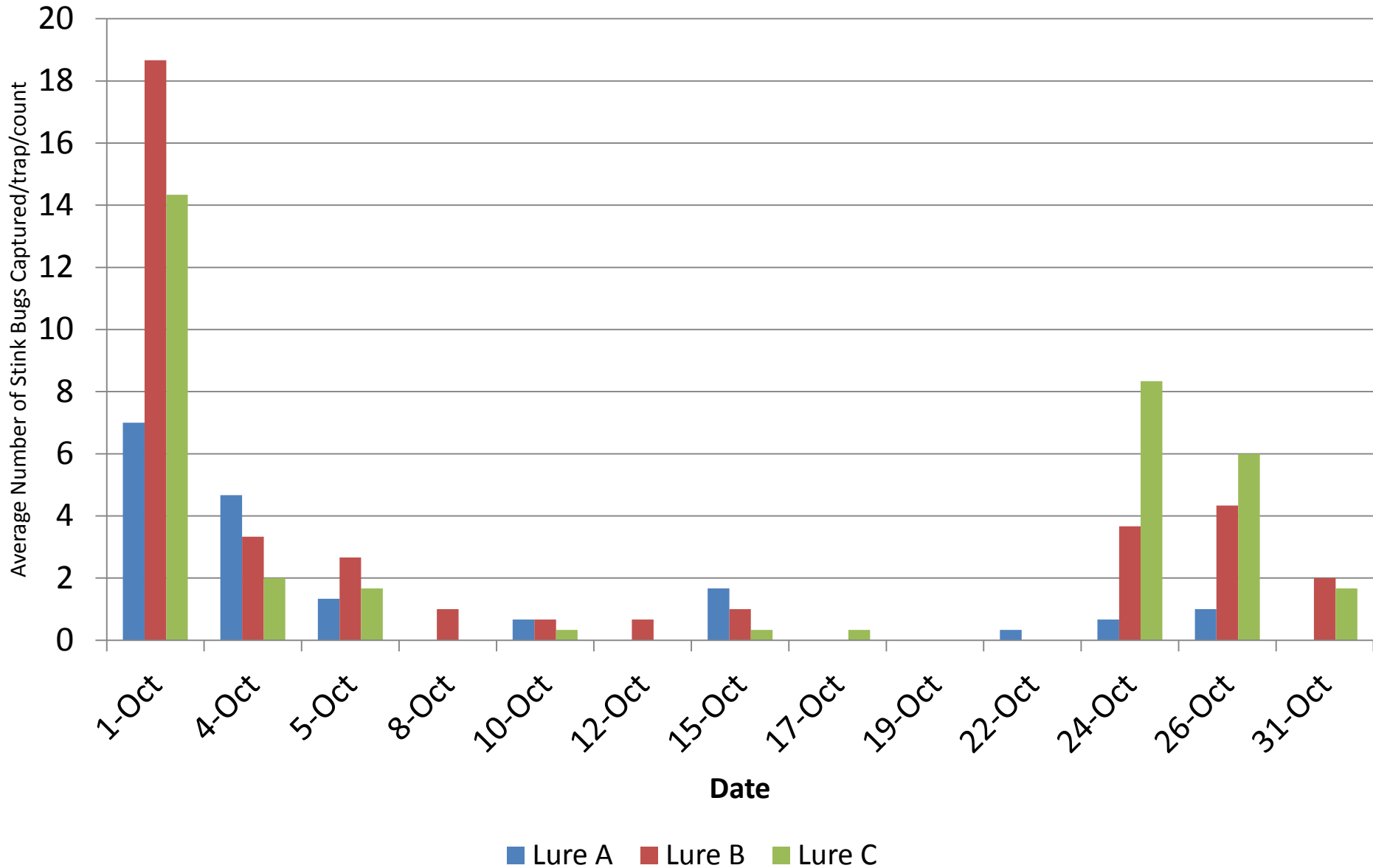
Franklin County, PA 2012



BMSB new commercial lures comparison,

Late season observations

Franklin County, PA 2012



EXTENSION TREE FRUIT ENTOMOLOGY PROGRAM SUMMER 2012



Our crew:

Deonna Soergel – M Sc Graduate student

Travis Enyart – Research technologist

Amy Baugher, Ryan Callahan, Kerry Campbell, Matt Guise, Andy Goodyear,
Erica VanDyke, Chris Placentia, Nicole Quinn, Rachel Troyer - Summer assistants

Nicolas H. Ellis – Ph.D. Program support

Financial support:

*State Horticultural Association of PA, Pennsylvania Apple Marketing Board, Pennsylvania
Department of Agriculture, USDA ARS, USDA NIFA SCRI, Ag-chemical industry*

BMSB Website Activity

Comparisons Of Past Two Years

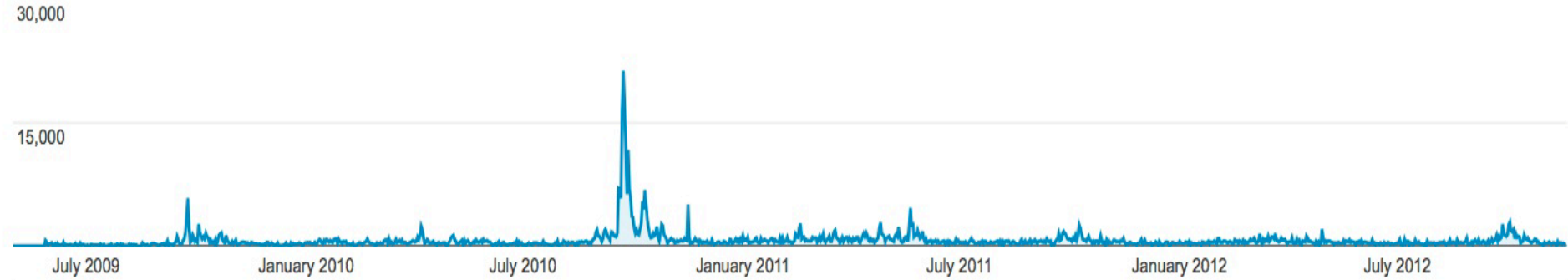
*Prepared by
Steven Jacobs
PSU Dep. of Entomology*

Overview

Visits vs. Select a metric

Hourly Day Week Month

Visits



Show: All | Starred

+ Create new annotation

803,012 people visited this site

Visits: 851,929

Unique Visitors: 803,012

Pageviews: 2,299,619

Pages / Visit: 2.70

Avg. Visit Duration: 00:01:09

Bounce Rate: 83.46%

% New Visits: 88.48%



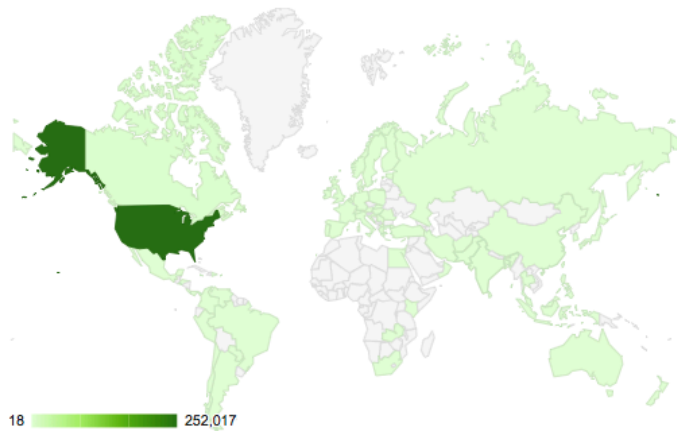
88.48% New Visitor

753,790 Visits

11.52% Returning Visitor

98,139 Visits

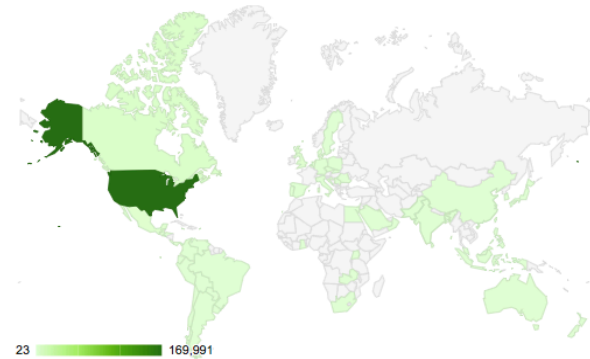
BMSB World 2011



18 252,017

BMSB	Visits 262,510 <small>% of Total: 6.23% (4,213,069)</small>	Pages / Visit 2.81 <small>Site Avg: 2.95 (-4.76%)</small>	Avg. Visit Duration 00:01:14 <small>Site Avg: 00:02:12 (-44.14%)</small>	% New Visits 86.55% <small>Site Avg: 66.03% (31.09%)</small>	Bounce Rate 82.19% <small>Site Avg: 63.60% (29.23%)</small>
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Country / Territory	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
1. United States	252,017	2.82	00:01:13	86.32%	82.21%
2. Canada	3,984	2.52	00:01:41	91.97%	79.47%
3. United Kingdom	800	2.11	00:01:10	91.12%	77.75%
4. Mexico	551	1.32	00:00:06	96.91%	83.85%
5. Spain	516	1.52	00:02:21		



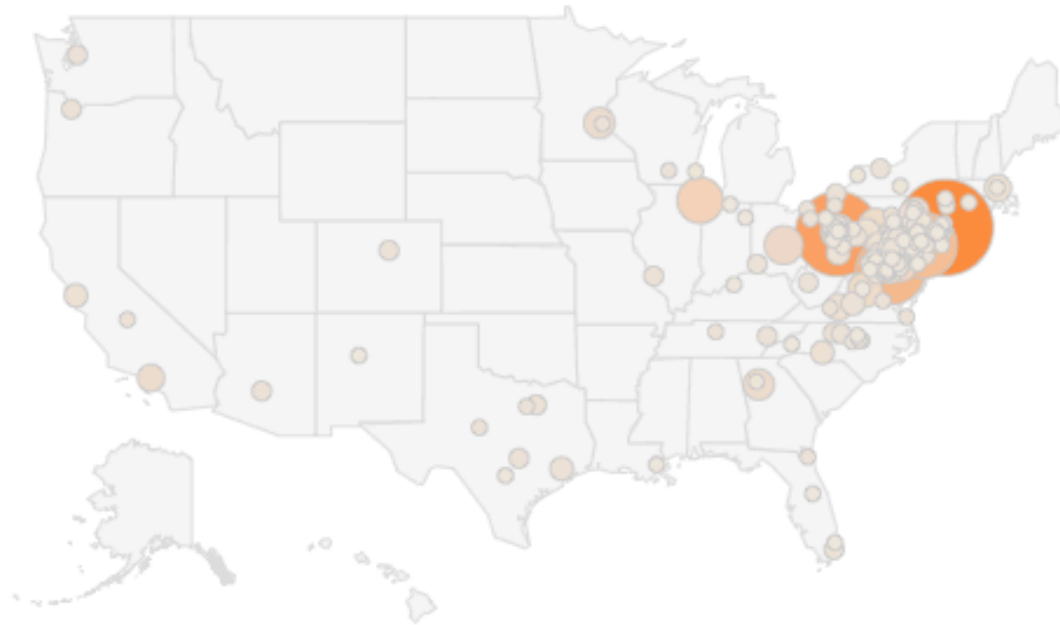
23 169,991

BMSB	Visits 181,936 <small>% of Total: 3.42% (5,323,105)</small>	Pages / Visit 3.37 <small>Site Avg: 2.63 (28.26%)</small>	Avg. Visit Duration 00:01:23 <small>Site Avg: 00:02:03 (-32.72%)</small>	% New Visits 88.15% <small>Site Avg: 72.50% (21.58%)</small>	Bounce Rate 78.21% <small>Site Avg: 67.09% (16.57%)</small>
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Country / Territory	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
1. United States	169,991	3.45	00:01:25	87.93%	77.81%
2. Canada	3,465	2.58	00:01:23	90.79%	76.97%
3. Mexico	1,140	1.30	00:00:12	87.98%	82.02%
4. United Kingdom	980	1.40	00:00:41	88.37%	86.02%
5. (not set)	798	2.26	00:01:06	91.35%	82.83%
6. Spain	593	6.27	00:03:51	84.65%	80.78%

BMSB World 2012

BMSB U.S. Cities 2011

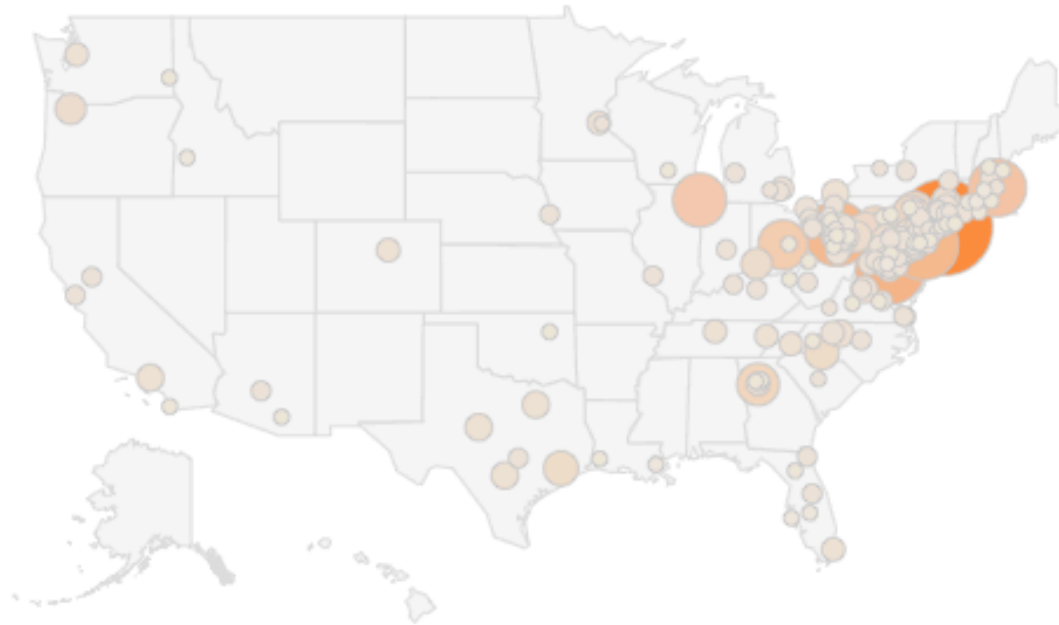


213  13,445

	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	252,017 % of Total: 5.98% (4,213,069)	2.82 Site Avg: 2.95 (-4.37%)	00:01:13 Site Avg: 00:02:12 (-45.06%)	86.32% Site Avg: 66.03% (30.74%)	82.21% Site Avg: 63.60% (29.26%)

City	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
1. New York	13,445	1.45	00:00:37	89.02%	87.04%
2. Pittsburgh	10,048	3.87	00:01:46	69.21%	78.23%
3. Washington	6,793	1.49	00:00:32	86.91%	87.71%
4. Philadelphia	5,869	2.70	00:01:33	84.85%	78.48%
5. Chicago	3,059	1.86	00:00:39	90.13%	81.40%

BMSB U.S. Cities 2012



137  6,702

	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	169,991 % of Total: 3.19% (5,323,105)	3.45 Site Avg: 2.63 (31.47%)	00:01:25 Site Avg: 00:02:03 (-31.45%)	87.93% Site Avg: 72.50% (21.28%)	77.81% Site Avg: 67.09% (15.97%)

City	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
1. New York	6,702	2.27	00:00:56	91.50%	87.42%
2. Washington	3,556	2.36	00:02:03	86.53%	80.76%
3. Philadelphia	3,351	3.99	00:02:00	85.71%	65.29%
4. Pittsburgh	3,214	6.89	00:03:27	73.77%	60.98%
5. Boston	2,439	2.54	00:00:41	89.71%	84.13%

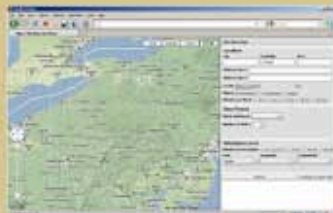
The Insect

Where is BMSB?

The Brown Marmorated Stink Bug

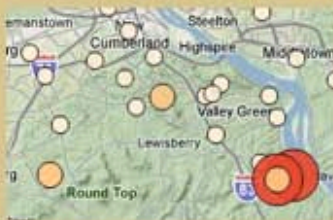
Description

Contribute



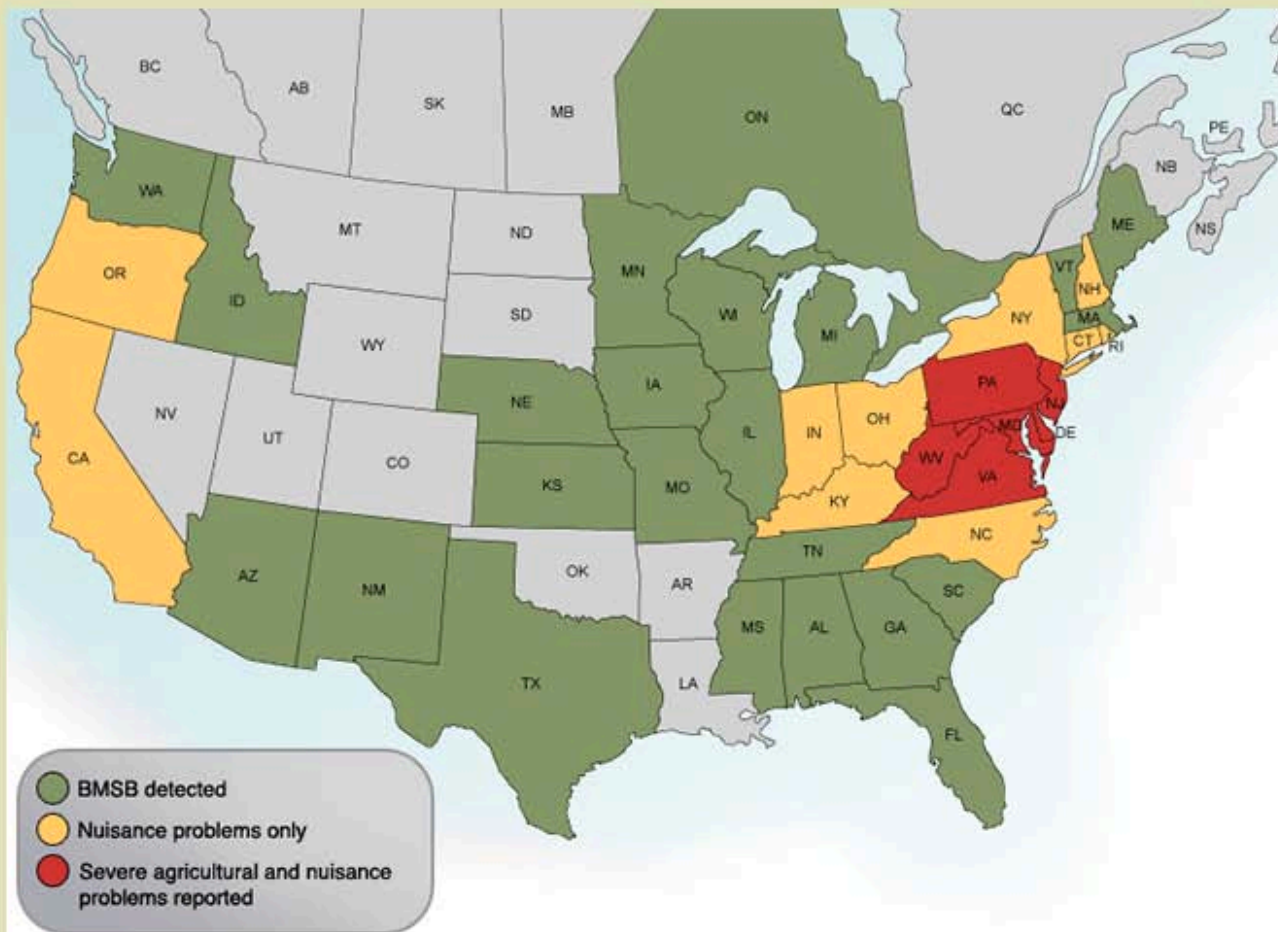
Report Brown Marmorated Stink Bug Sightings

Explore

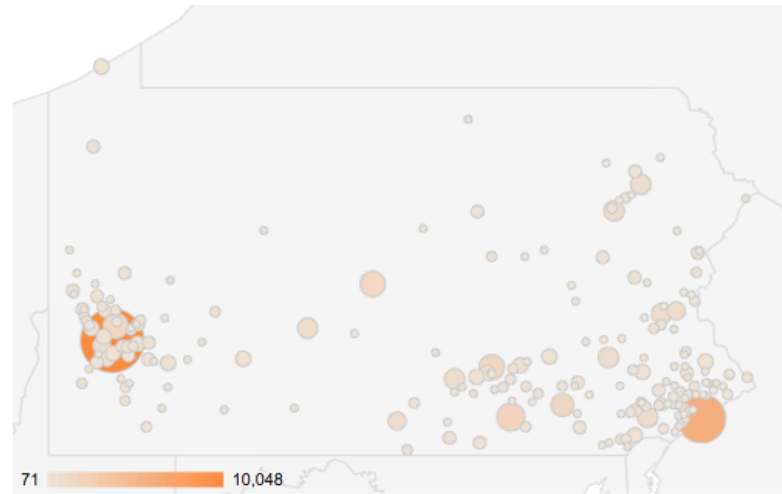


Explore Brown Marmorated Stink Bug Sightings

Where is the Brown Marmorated Stink Bug?

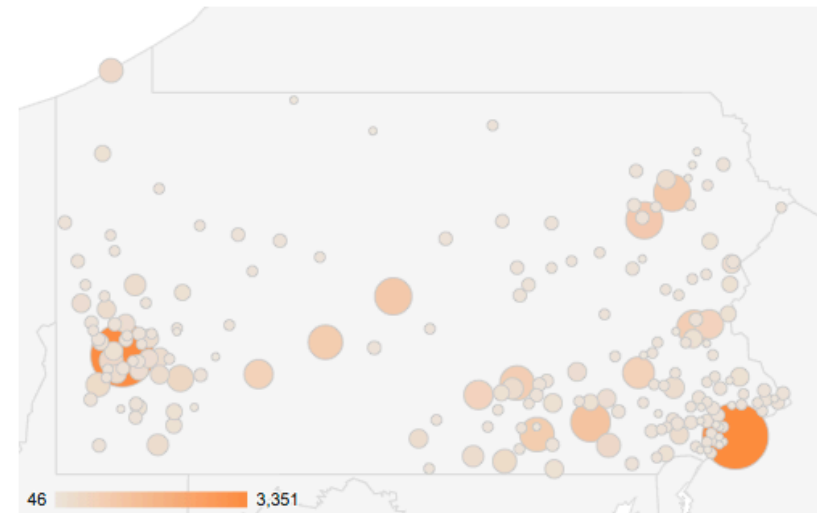


BMSB PA 2011



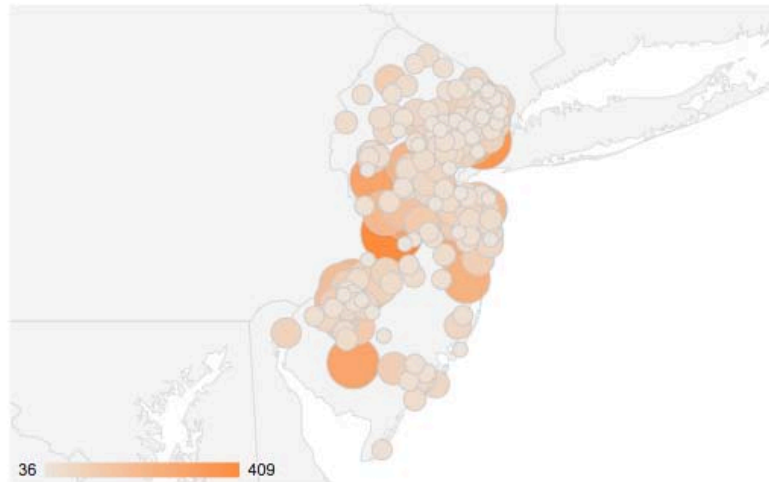
	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	76,774 % of Total: 1.82% (4,213,069)	5.76 Site Avg: 2.95 (95.58%)	00:02:26 Site Avg: 00:02:12 (10.18%)	78.43% Site Avg: 66.03% (18.79%)	70.03% Site Avg: 63.60% (10.10%)

BMSB PA 2012



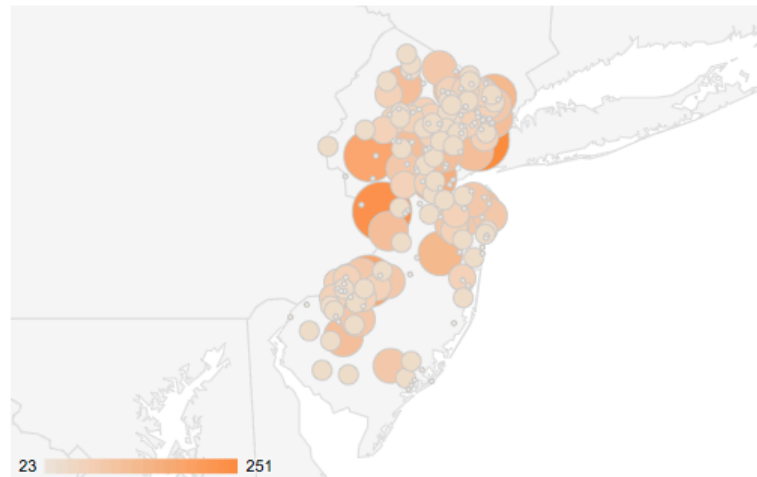
	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	46,527 % of Total: 0.87% (5,323,105)	7.85 Site Avg: 2.63 (198.96%)	00:03:06 Site Avg: 00:02:03 (51.10%)	82.31% Site Avg: 72.50% (13.53%)	56.54% Site Avg: 67.09% (-15.72%)

BMSB NJ 2011



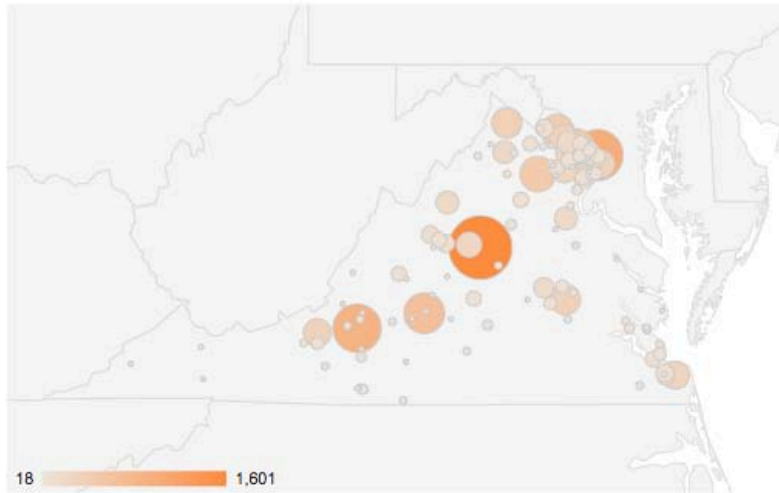
	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	21,821 % of Total: 0.52% (4,213,069)	1.67 Site Avg: 2.95 (-43.31%)	00:00:43 Site Avg: 00:02:12 (-67.42%)	90.30% Site Avg: 66.03% (36.77%)	88.02% Site Avg: 63.60% (38.40%)

BMSB NJ 2012



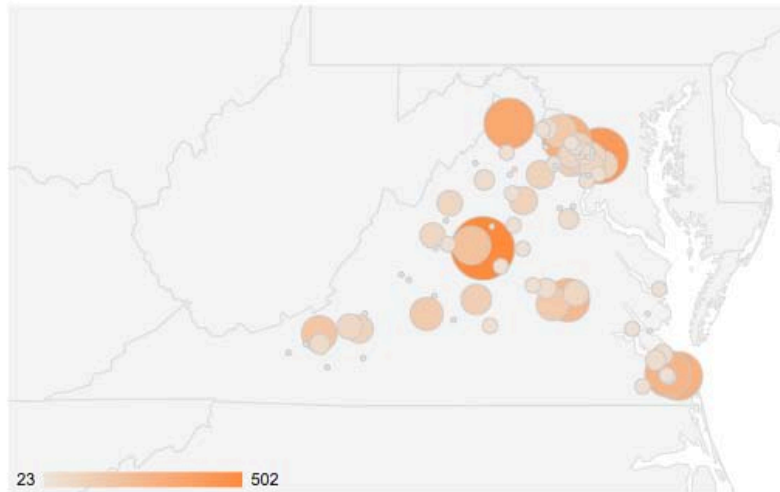
	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	10,714 % of Total: 0.20% (5,323,105)	1.71 Site Avg: 2.63 (-34.93%)	00:00:45 Site Avg: 00:02:03 (-63.28%)	92.35% Site Avg: 72.50% (27.37%)	84.90% Site Avg: 67.09% (26.54%)

BMSB VA 2011



	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	15,401 % of Total: 0.37% (4,213,069)	1.30 Site Avg: 2.95 (-55.74%)	00:00:41 Site Avg: 00:02:12 (-68.99%)	89.49% Site Avg: 66.03% (35.54%)	90.64% Site Avg: 63.60% (42.52%)

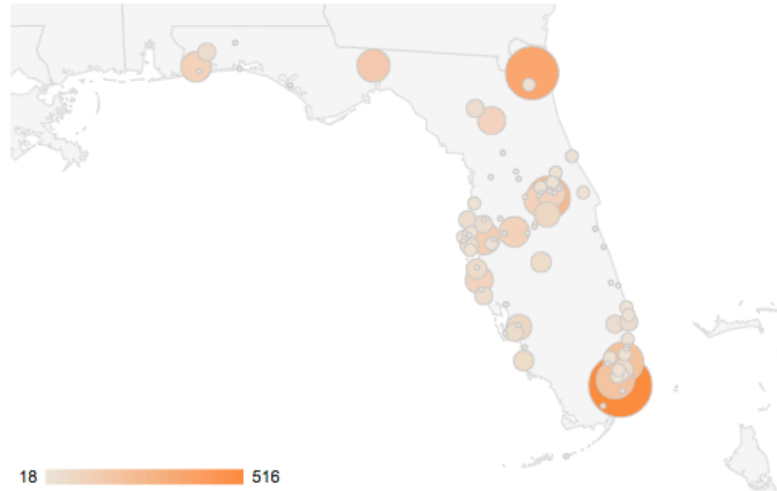
BMSB VA 2012



	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	7,044 % of Total: 0.13% (5,323,105)	1.28 Site Avg: 2.63 (-51.19%)	00:00:24 Site Avg: 00:02:03 (-80.24%)	89.32% Site Avg: 72.50% (23.20%)	91.58% Site Avg: 67.09% (36.50%)

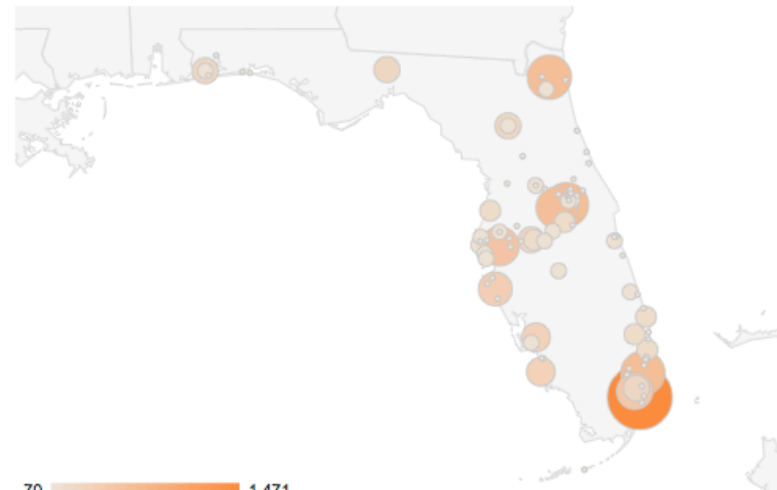


BMSB FL 2011



	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	4,873 % of Total: 0.12% (4,213,069)	1.27 Site Avg: 2.95 (-56.76%)	00:00:53 Site Avg: 00:02:12 (-59.81%)	92.33% Site Avg: 66.03% (39.83%)	85.76% Site Avg: 63.60% (34.84%)

BMSB FL 2012



	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
BMSB	15,200 % of Total: 0.09% (16,801,419)	1.55 Site Avg: 2.82 (-44.83%)	00:00:40 Site Avg: 00:02:09 (-69.20%)	91.70% Site Avg: 65.56% (39.88%)	86.64% Site Avg: 64.78% (33.74%)