

BMSB From the Perspective of an Urban PCO



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Stink bugs gaining attention in the urban environment



WEST VIRGINIA PUBLIC BROADCASTING

Home News Television Radio Mountain Stage

Stinky pest finds its way into WV homes

By Eric Waddon and G...
WVU School of Jour...
June 3, 2010
Marmorated relative
the U...



Sunday, February 21, 2010

There's something in the air, but it smells nothing like spring

Kevin Riordan
The Jersey Side

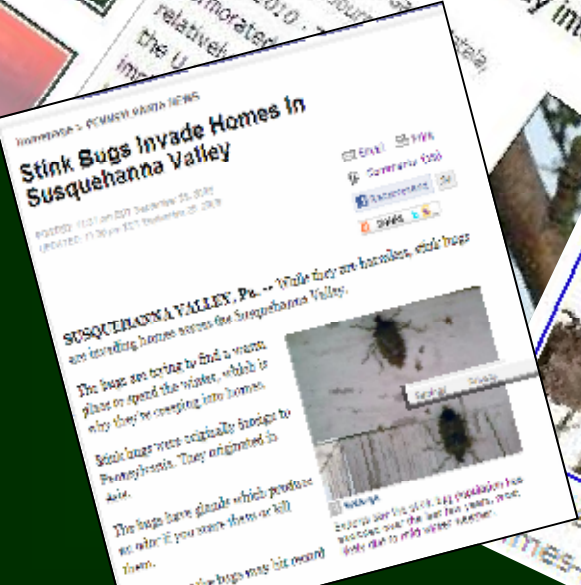
They're compact, they and they don't fly. So much so that they're not even on the radar of most people. Meet the brown marmorated stink bug.

pears. Lesson learned: In my man cave, death-by-toilet is now the preferred method of extermination. Despite the bug-killing abilities of humans, the bug is finding its way into tables.



Stink bugs present a growing problem in N.J. as population increases

Stephen Stalling/For the Star Ledger




Stink Bugs Invade Homes in Susquehanna Valley

SUSQUEHANNA VALLEY, Pa. -- While they are hassles, stink bugs are invading homes across the Susquehanna Valley.

The bugs are trying to find a warm place to spend the winter, which is why they're creeping into homes.

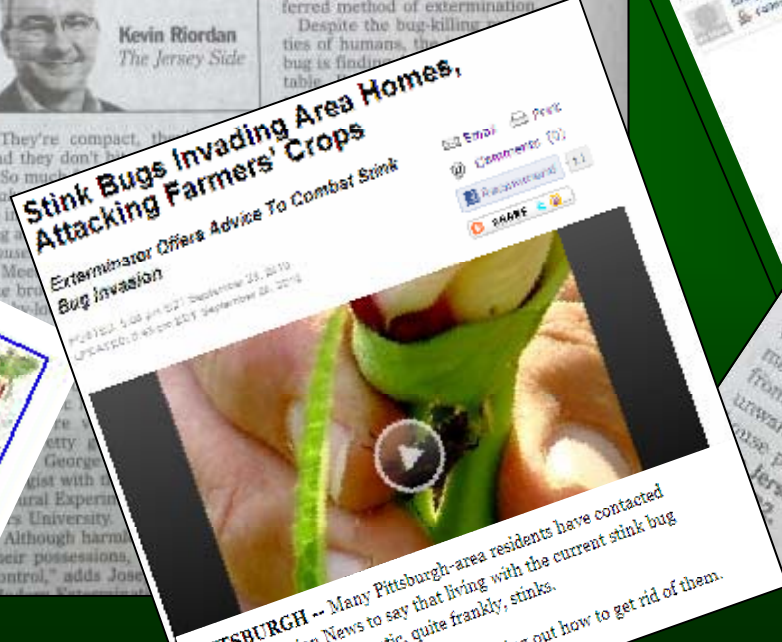
Stink bugs were originally brought to Pennsylvania. They originated in Asia.

The bugs have glands which produce an odor if you squish them or kill them.



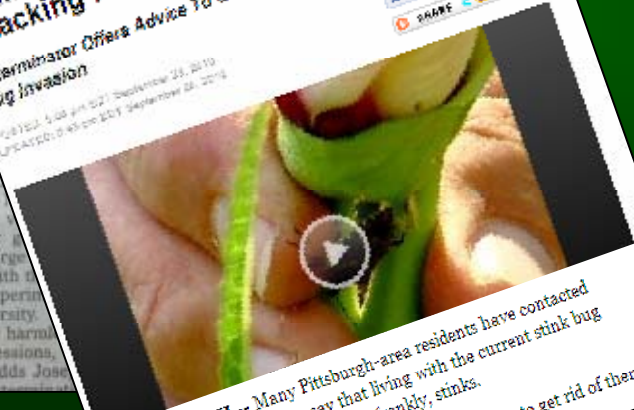
Bugged Out!

Stink bugs are invading homes across the Susquehanna Valley.

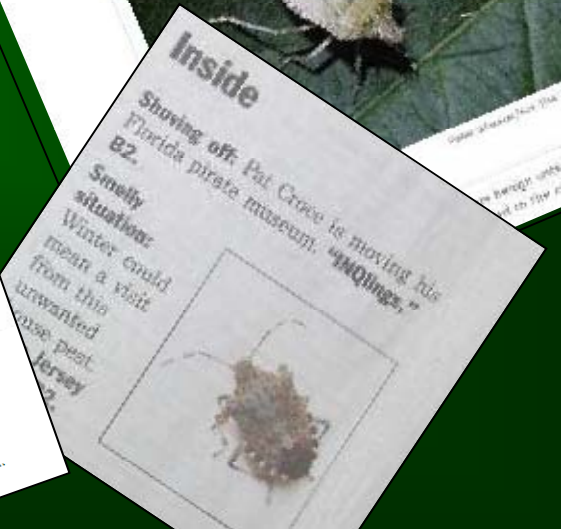


Stink Bugs Invading Area Homes, Attacking Farmers' Crops

Exterminator Offers Advice To Combat Stink Bug Invasion




PITTSBURGH -- Many Pittsburgh-area residents have contacted...
...to say that living with the current stink bug...
...quite frankly, stinks.



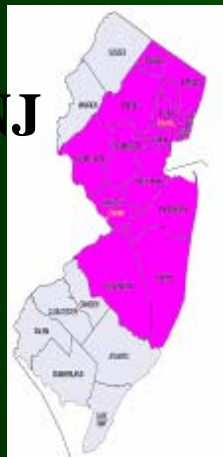
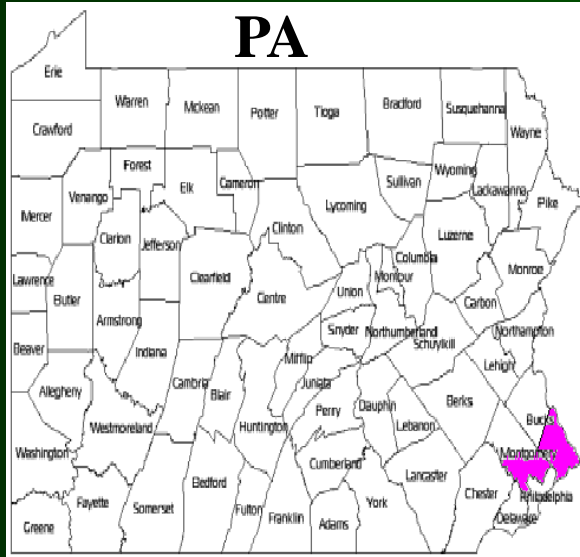
Inside

Shoving off: Pat Green is moving his Florida pirate museum. "InQlines."

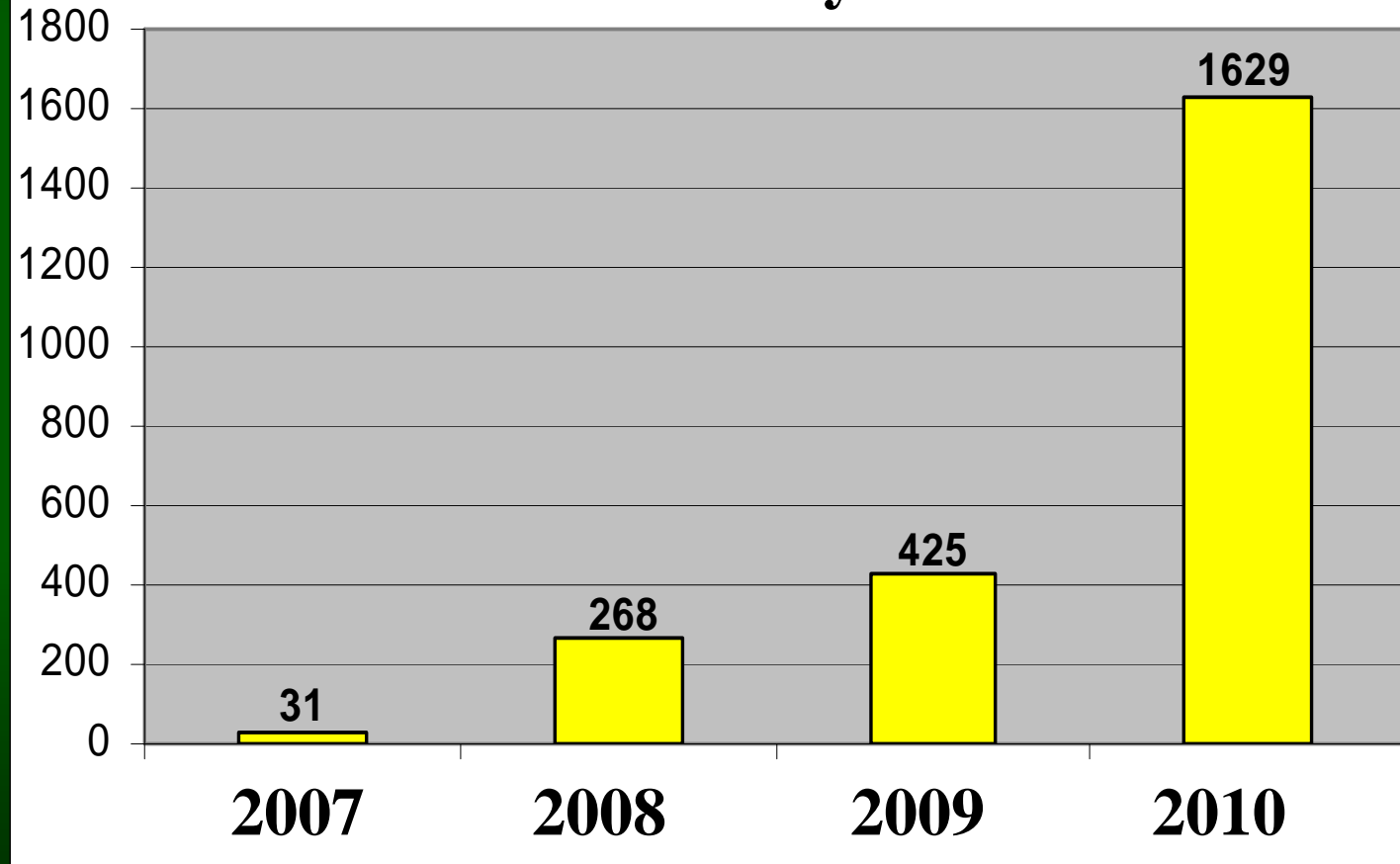
Smelly situation: Winter could mean a visit from this unwanted house-pest, Jersey...



Increase in BMSB Activity



Total # of Jobs by Year



Data Source: Cooper Pest Solutions



**What's the Big Deal
They're Just a
Nuisance, Right?**



BMSB is Different Than Other Over-wintering Pests!

- **Enter earlier and leave later than other over-wintering pests**
- **Active throughout entire winter**
 - Get into people's stuff - clothes, bed sheets, in boxes, amongst piles of papers, etc.. (becomes infuriating)
 - Very active at night and attracted to lights (disruptive & creates anxiety)
 - Very problematic in sensitive environments (i.e. hospitals, FDA & USDA regulated facilities, etc.)

Typical Industry Response

Repeated treatment
indoors where clients
seeing bugs!

End Result:

**Unnecessary Exposure To Pesticides
With Little to No Benefit!**

Cooper Pest approached BMSB the same as other over-wintering pests

Exterior

- Recommend sealing gaps around windows, flashing...
- Treatments made around roof flashing, window frames, weep holes (lift work often required)



Interior:

Non chemical approach

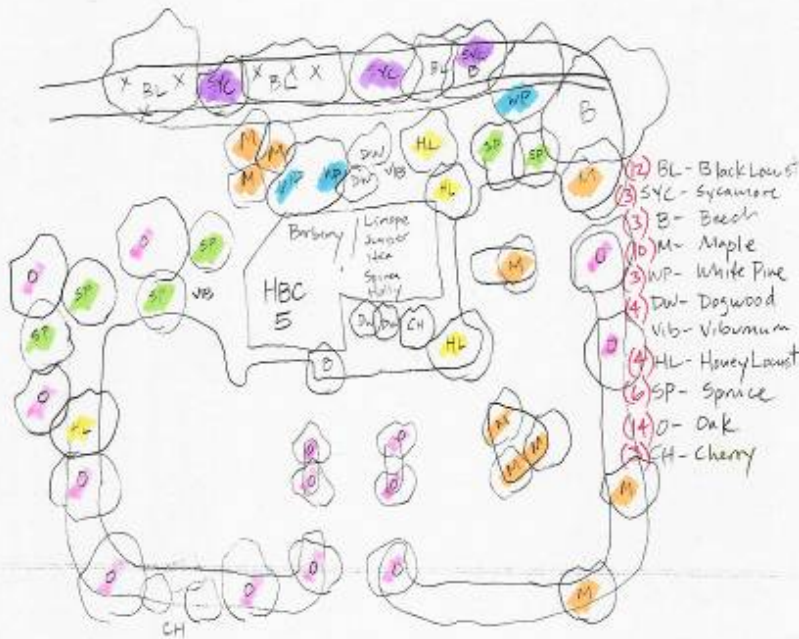
- Sealing gaps around windows, outlets, etc...
- Vacuuming by technician at time of service
- Light traps in drop ceilings
- Glue boards in drop ceiling by light fixtures



**Results have
generally been poor
for BMSB**

**Believe this was largely
a “Timing” Issue!**

2008' Cooperative Effort with Rutgers University

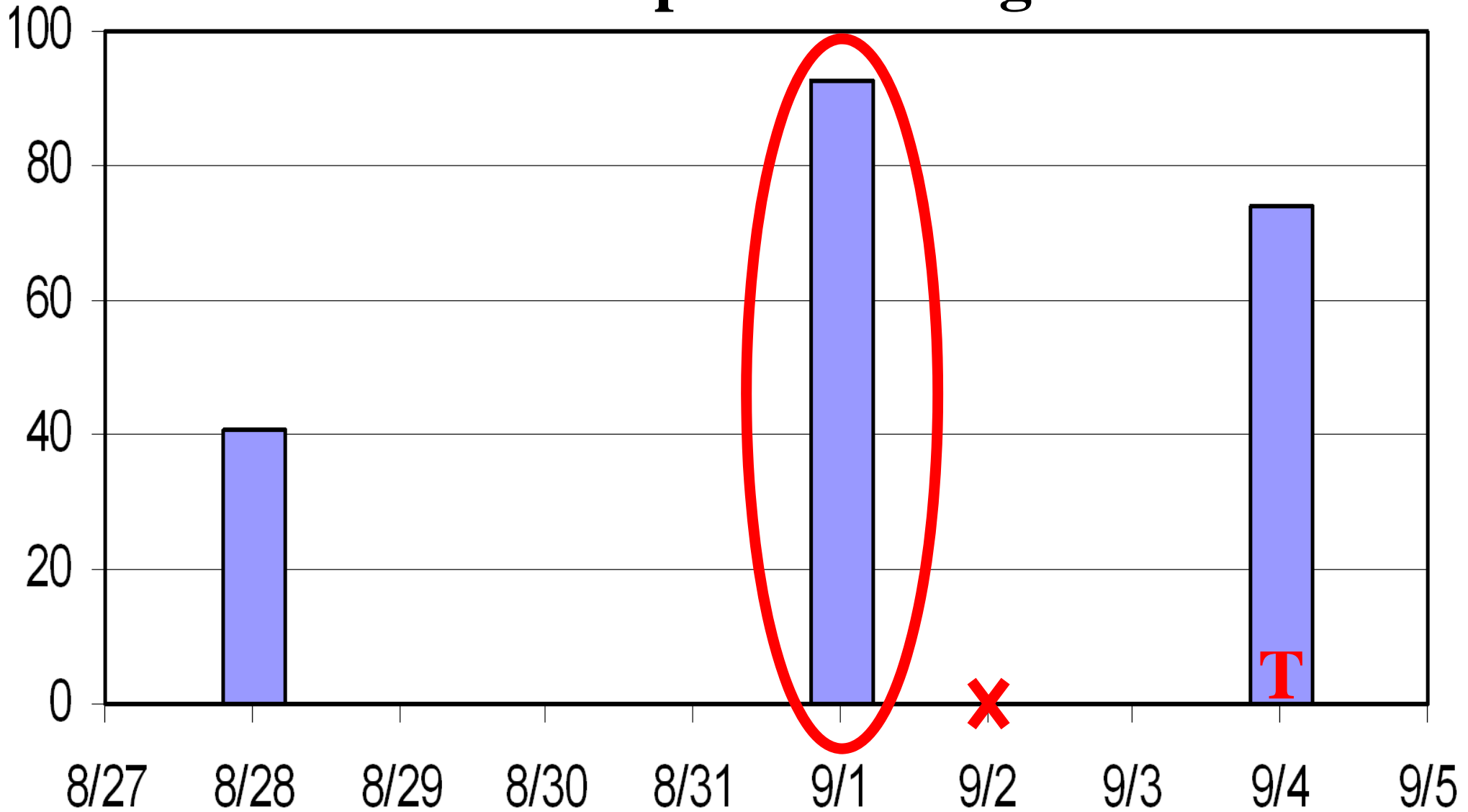


Beat Sampling



**Pheromone
Traps**

Total Trap Catch Bldg 5



Data: Courtesy of Dr. George Hamilton

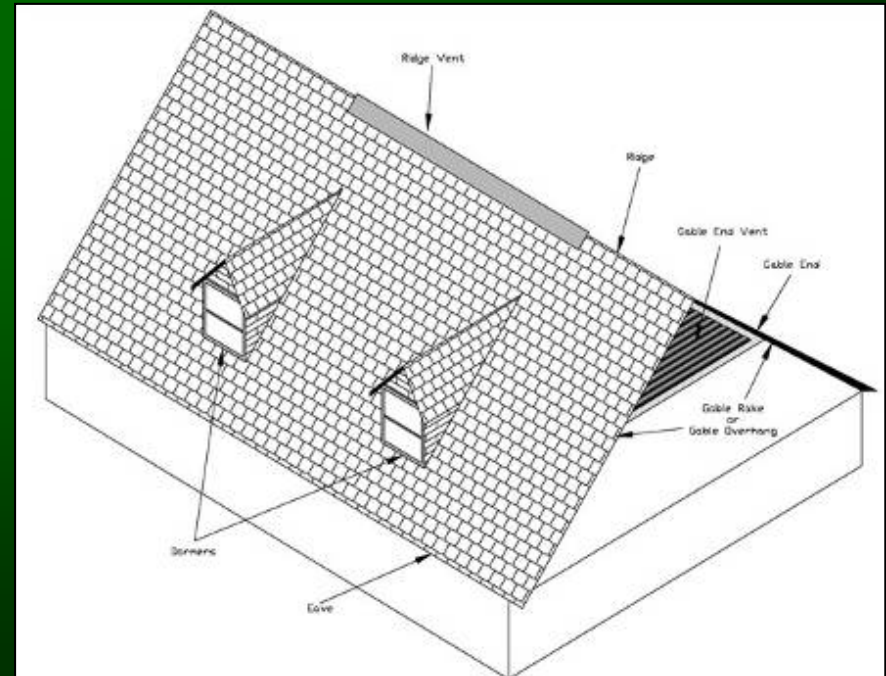
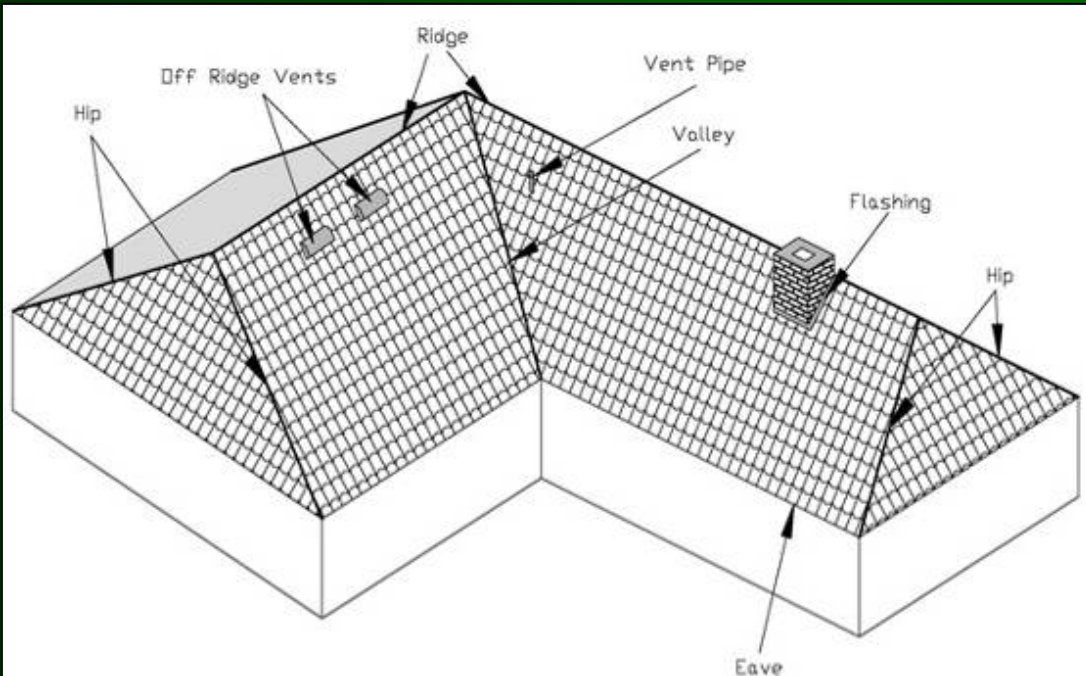
Want to be able to predict & prevent pest entry based upon relationships between buildings and host plants



BMSB Management on Residential Properties



Focus is on treatment of exterior points of entry



Interior: Treatment limited to attics



Feb/March 2010' Customer Satisfaction Survey

“I was told this was only a reduction service and...”

Wow

“I haven’t seen any since the time of treatment.”

Good

“the #'s were significantly reduced I would pay for the service again.”

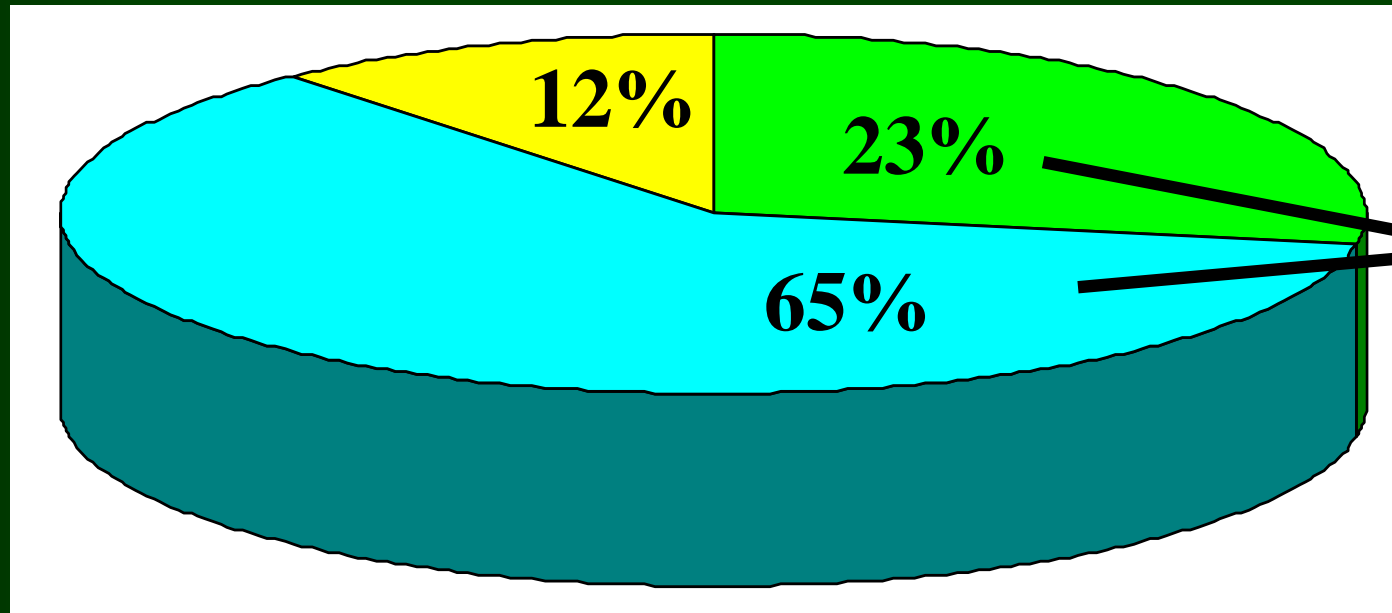
Poor

“I was disappointed in the level of reduction and would not pay for the service again.”

Fail

“I was completely dissatisfied, it was like you were never here.”

Customer Satisfaction (09'/10')



**88%
Pleased
With
Results**



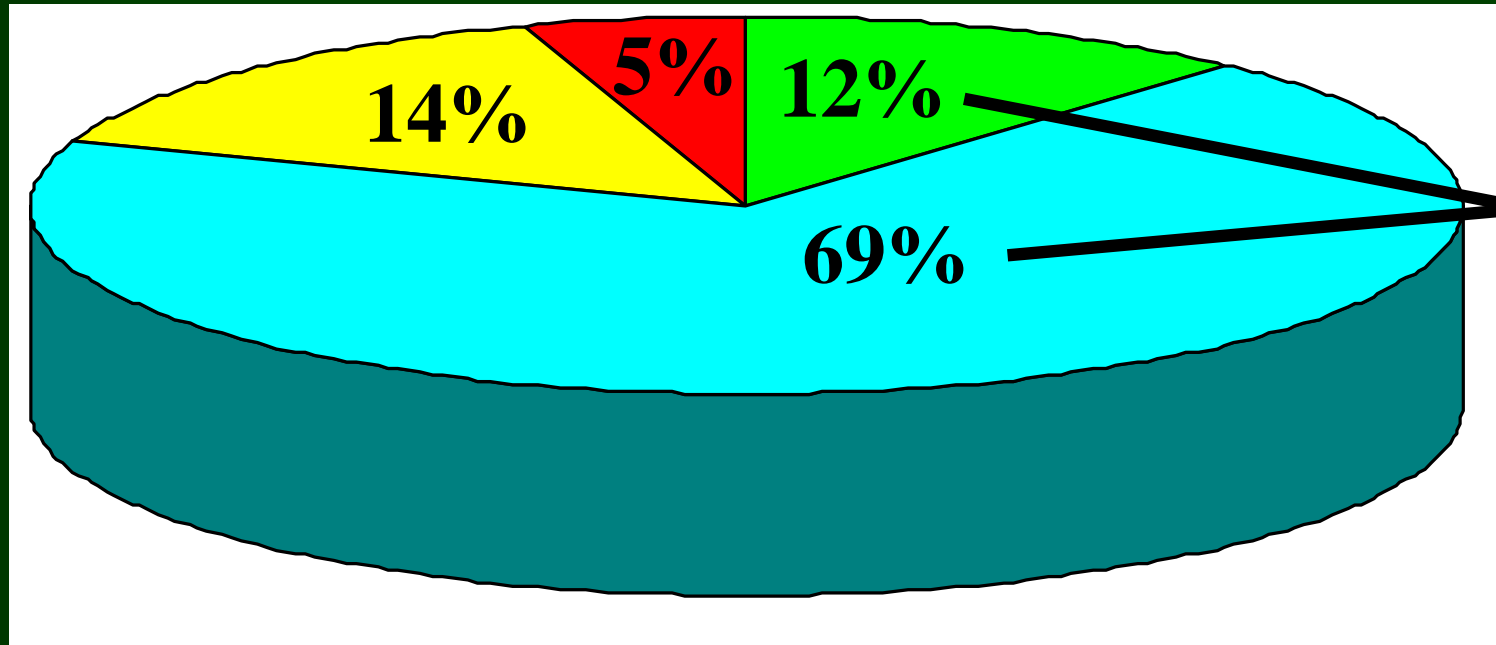
**Contacted 72 Clients
30 responded to the survey
= 42% response rate**

Summer 2010' Rolled Out Residential Campaign

Treatments first two weeks of September

- Set expectations at 90% reduction in activity compared to what they were accustomed to seeing
- Provided an unlimited service plan if treatments provided before September 15th

Customer Satisfaction (10'/11')



**81%
Pleased
With
Results**



**Contacted 220 Clients
123 responded to the survey
= 56% response rate**

A Need For Research!

1. What attracts them to structures, i.e. color, size, shadows, compass direction, etc?
2. How far do they typically travel from host plants to structures for over-wintering (scope of concern)
3. What are the most effective methods for preventing entry into structures i.e. targeted applications to host plants, mass trapping, trap plantings, etc?
4. What triggers them to leave structures and is there another opportunity to control them at that time?
5. Insecticide studies i.e. efficacy, residual lifespan, etc..

Acknowledgments

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Thank You



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