

**MADE IN USA**



**STRUBE'S<sup>TM</sup>**

**STINK BUG TRAPS**

**WWW.STINKBUGTRAPSONLINE.COM**



(9/19/2010) Our first experience of a stink bug invasion.



Thousands of them covered our house!



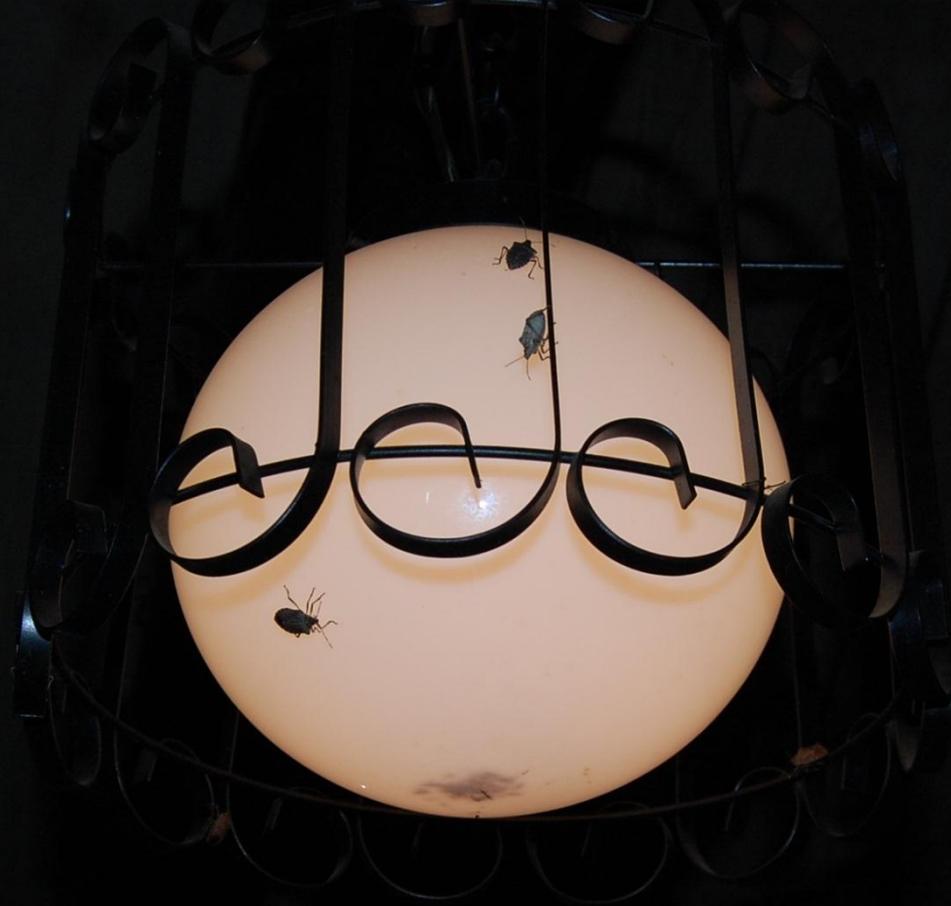
OUTSIDE

“STINK BUGS EVERYWHERE”





PSU entomologist Greg Krawczyk collected hundreds of stink bugs nestled under some plywood ready to overwinter.



What was I going to do about all the stink bugs  
that made their way inside the house?



I HAD AN IDEA! WHAT IF WE PUT A LIGHT ON THE INSIDE OF A TRAP?





(November, 2010) I constructed our very first indoor light trap using three magnified LED lights.



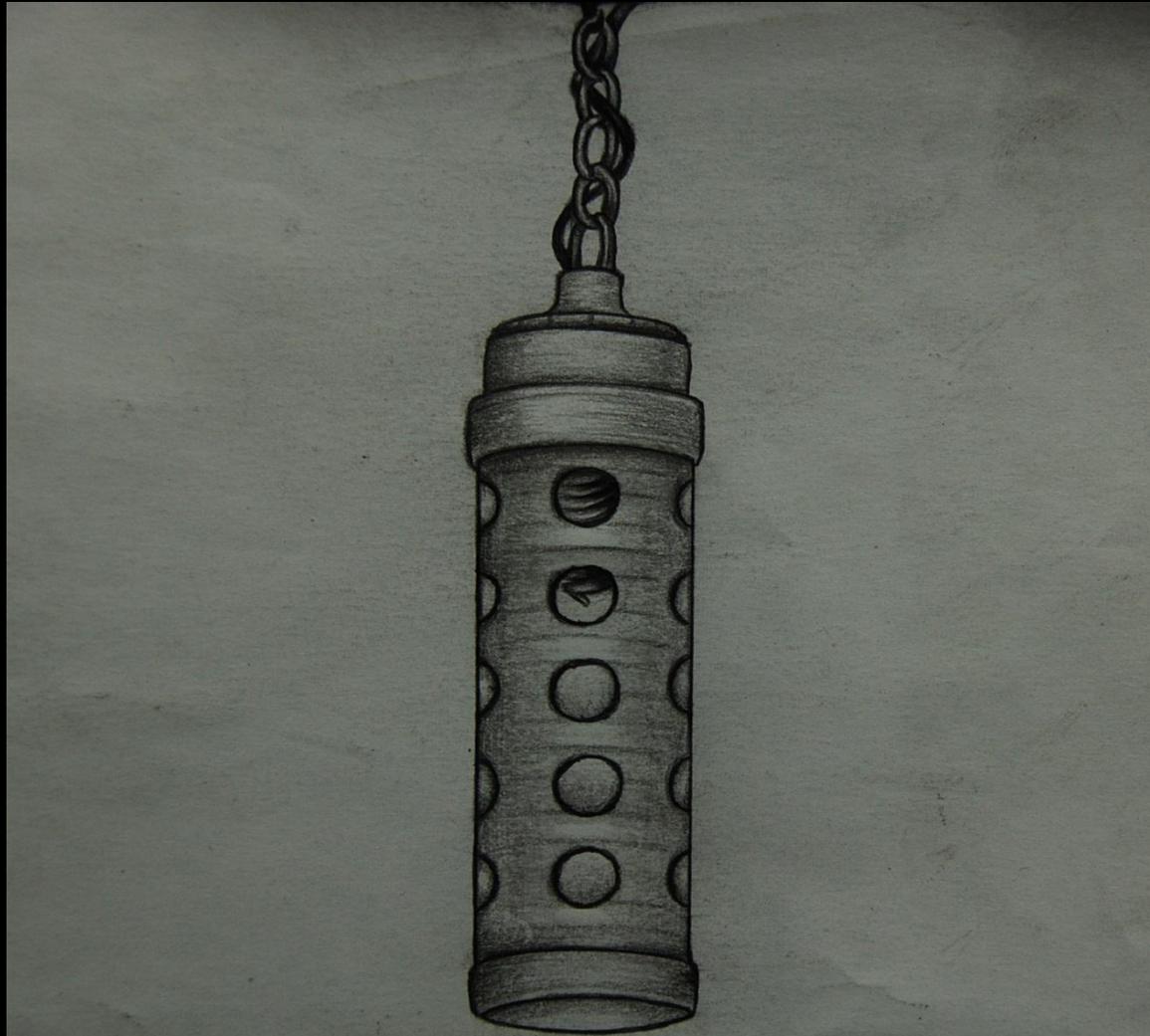
I tried purple, green, blue, red, orange, and different combinations of LED's, but it still was not attracting stink bugs.



We later learned that even though LED's are bright and energy efficient they have no heat signature. We concluded that LED's have little to no stink bug attracting power, so we abandoned the LED trap and moved on.



**We thought back to the first coffee can trap and decided to put a small CFL inside a cylinder. Results speak for themselves.**



Here is a sketch of our hanging trap concept.







By July 2011, “operation stink bug” grew out of my basement garage and into this building located at 40 North Third St, Columbia, Pa 17512. (aka, stink bug central)



To commercialize our trap, we made some good changes for 2011/2012. A new sticky sleeve allowed us to save waste and make the trap much more user friendly. The old yellow “goo glue” worked, but it was hard to handle.



Our new trap works great, looks better, and is much easier to use.



June 23, 2011



From October, 2010 to January, 2011, we caught an estimated 27,000 stink bugs from inside our house. When spring sprang, the stink bugs moved out and so did the traps.



Realizing our traps worked outside, we hooked up with Tom Haas of Cherry Hill Orchards to see what we could do about the stink bugs in the peach trees.





It only took a few minutes to catch our first stink bug.



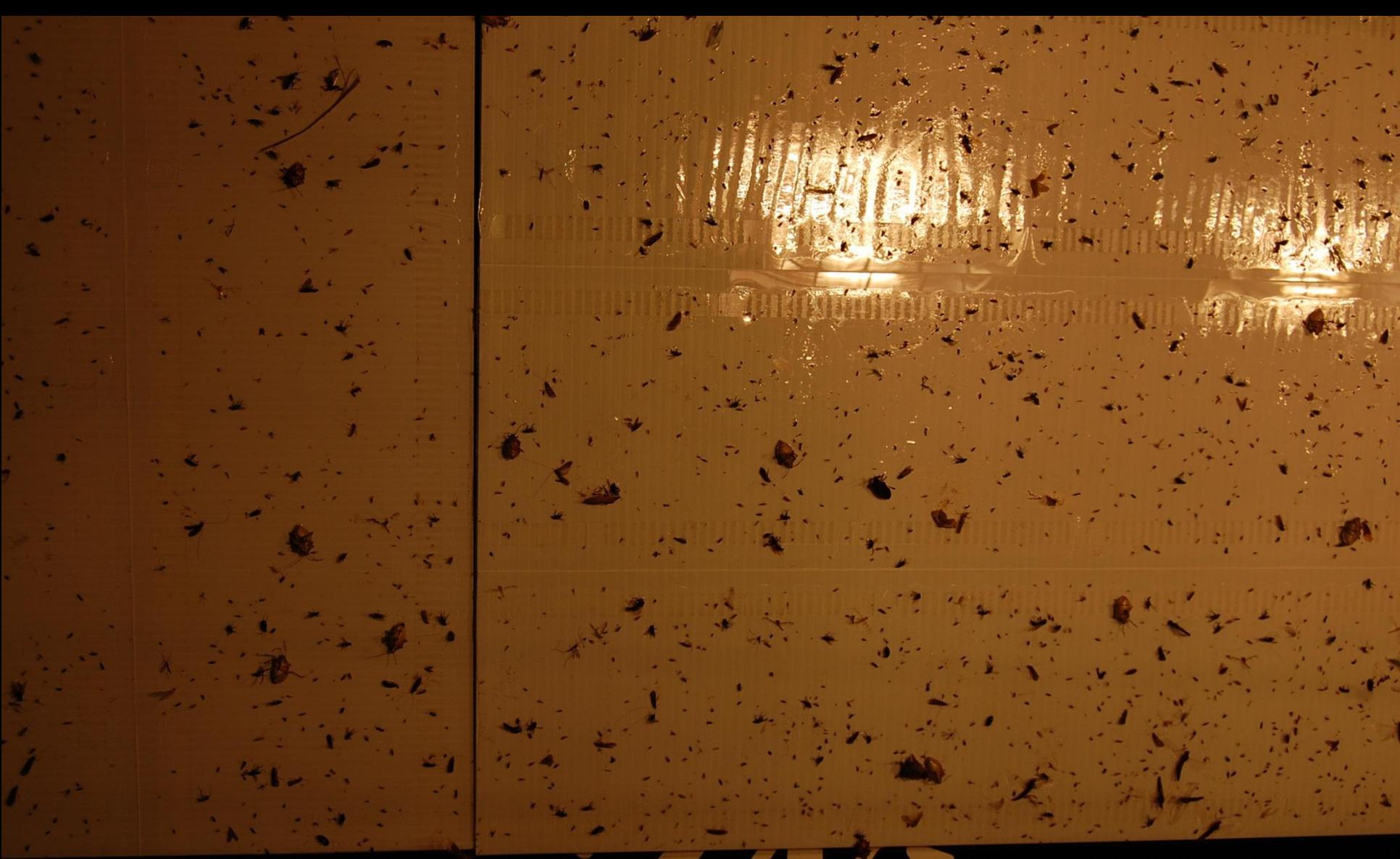
We did not feel like the small light trap was penetrating the tree enough, so we decided to go bigger.



The bigger trap did catch more and a lot quicker, but knowing the stink bug population in these trees, we were not satisfied with the numbers.



Next, we stepped up to 600 watt metal halide.  
Bigger brighter lights equal more coverage.



In one hour, we caught 51 stink bugs on the throw together trailer trap again confirming that bigger and brighter is better.



Within the first 10 hours of being in the orchard, we caught 171 Stink Bugs.



Still fighting to penetrate the thick canopy, we again went bigger on the lights, and this time we added elevation. Being able to get the light above the tree tops changed everything.



Stink bugs immediately headed towards the light.





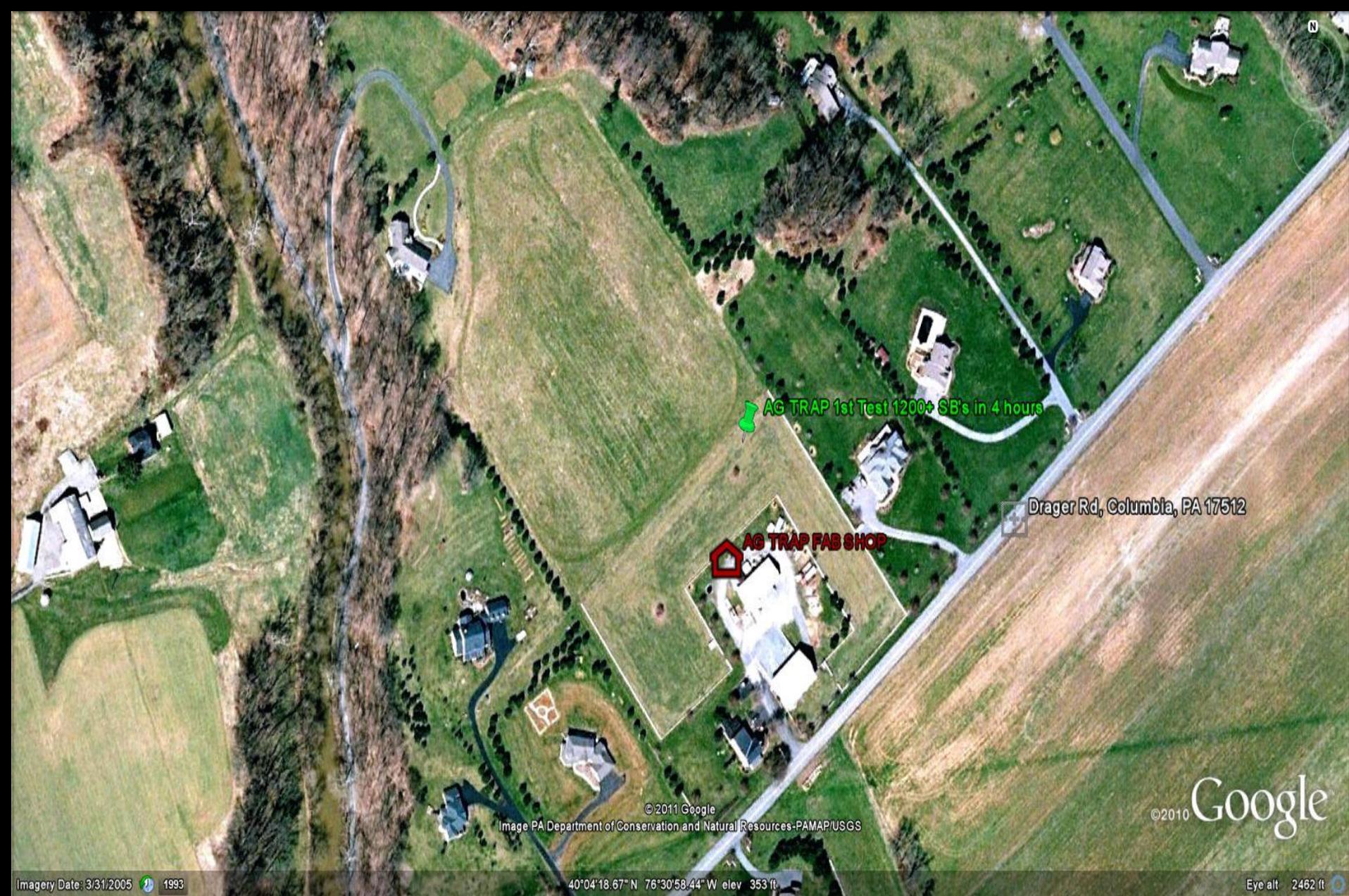
I missed the take-off, but this stink bug ended up on the trap seconds after this snapshot.



In just a few hours, we caught double what our total 10 hour count was using the smaller unit.



We knew the trap needed to be portable, capable of elevating above the trees tops, and affordable, so this is what I came up with. The trap fits on a skid and can be strapped to a utility vehicle, pick up truck, or can be staked to the ground.



The fabrication shop was located on the edge of a corn field that we soon found to be loaded with stink bugs.

## INTRODUCING THE PREDATOR STINK BUG TRAP (sticky version)



The sticky panels are crystal clear when the outer cover is removed.



The moment the trap was finished we rolled it out to the fab shop cornfield.



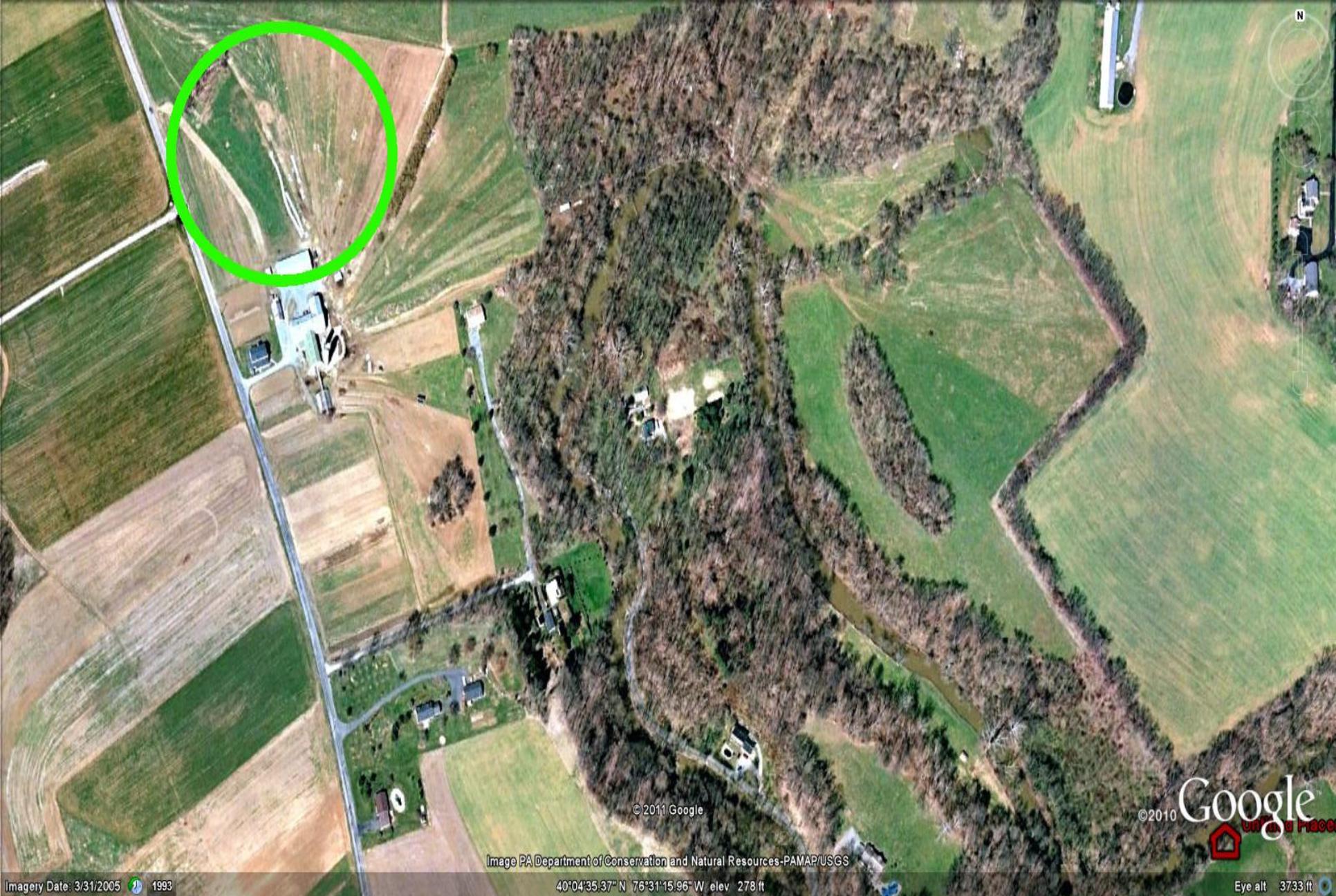
Stink bugs swarmed to the light trap!



Within the first few hours of its existence,  
this trap caught several thousand stink bugs!



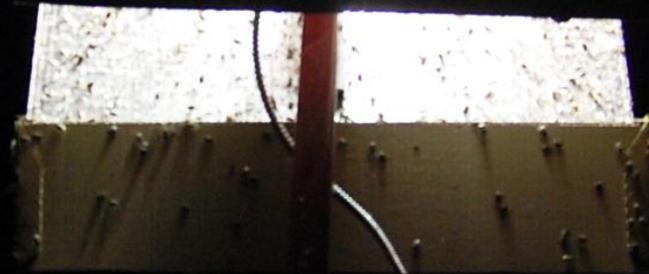
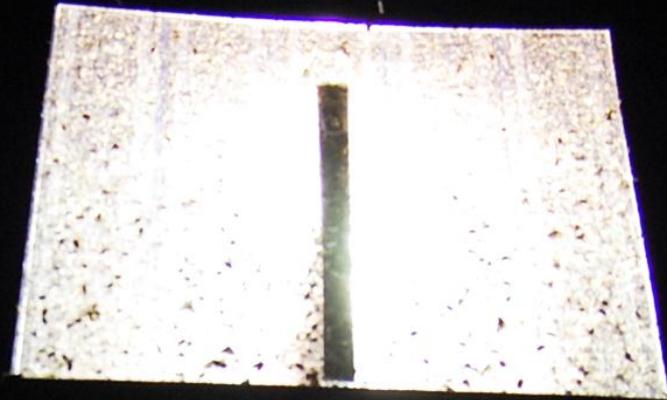
The Amish land owner heard of our presence and invited us to his family's farm to show us the stink bugs in his sweet corn crop.



(Long Lane, Donegal TWP, PA) The green circle represents coverage area at this location with the trap at half mast height.



(Amish Farm on Long Lane, Lancaster County) We put the trap on the trailer in case we needed to roll it around, but it ended up on the ground unsupervised. Respecting the Amish privacy, we deployed the trap and headed home. At 2am, we returned to swap the full panels for fresh ones. We retrieved our trap after sunrise.



When we returned, so many stink bugs were stuck to the trap that new stink bugs landing on it were walking across ones that were stuck fast.



When we changed panels, we noticed 2 lacewings and a couple moths. The stink bugs come in fast and stinky, so we don't feel our trap has much, if any, negative impact on beneficial insects.



(7/13/11 at 9pm to 7/14/11 at 6am) Seven Thousand adults were caught on an organic Amish farm. (no pesticides used)



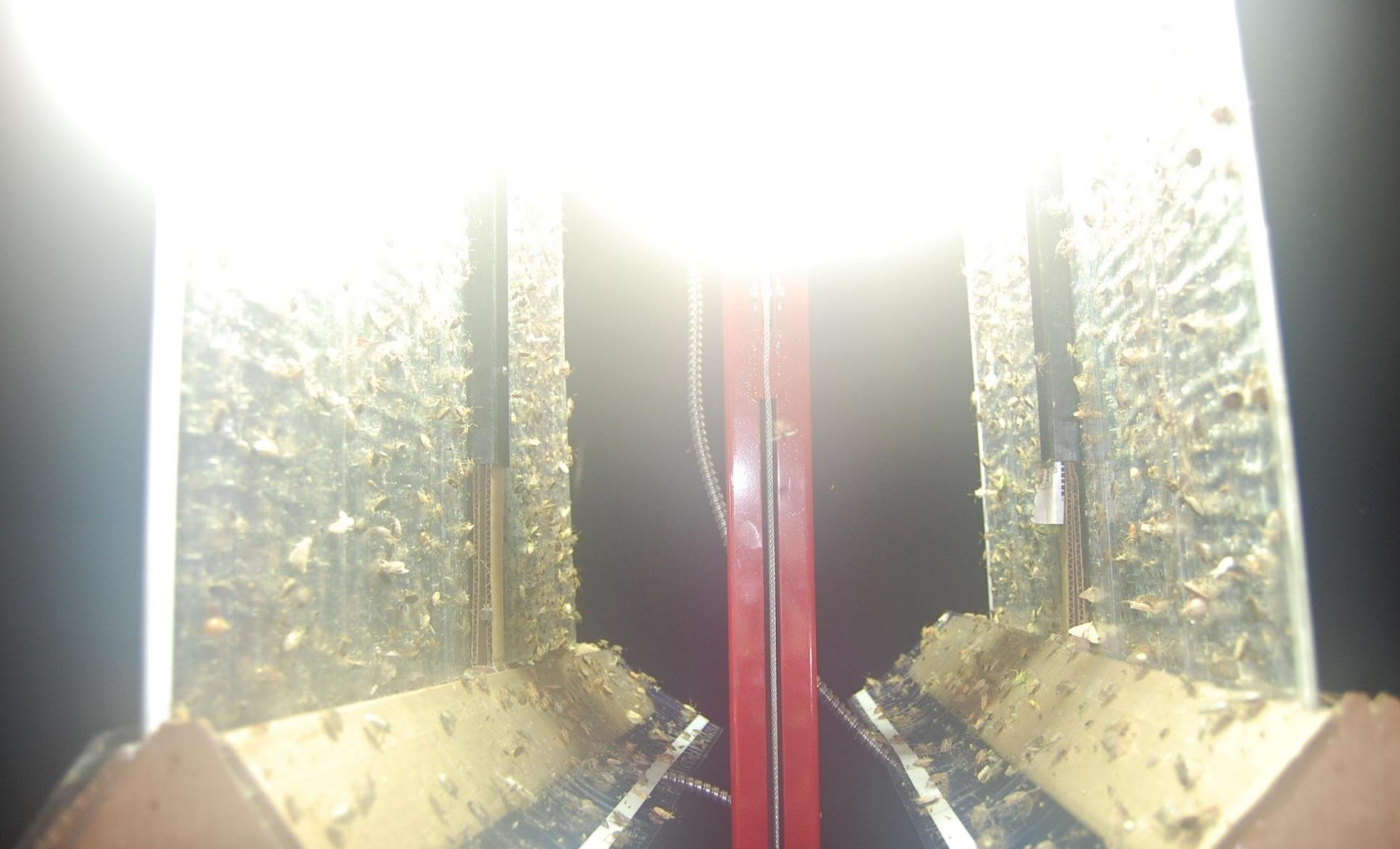
(Walkersville, MD on July 24, 2011) The areas circled in yellow were sites of heavy infestation



The farmer stated he had Hero sprayed at 30 GPA by Helicopter a couple weeks earlier but claimed that the rain a few days later washed away the pesticide.



Walkersville, MD – Soybean & Corn Mix



On this night, we mounted high definition cameras to the trap at 75% reduced speed to Monitor catch rates at different temperatures.

At the peak of the night it was 73 Degrees and we recorded 32 Stink Bugs a minute +/- 5  
 $27 \times 60 = 1620$  Stink Bugs Per Hour



We caught over six thousand SB's in five hours.



Back at Cherry Hill Orchard (store location),  
we begin trials with our new trap.



We have concluded that our (Predator Sticky Trap) is very useful for (BMSB) monitoring or control. If you have stink bugs, they will show up on the trap in most cases before the bulbs 15 minute warm up period.



There was a stink bug on that pesticide laden leaf, but he flew to the branch above as I snapped the picture.



I am not sure how quickly a pesticide is supposed to take effect on the stink bugs, but this little bugger was moving fast!





(BMSB) EGGS



On 9-1-11, we were introduced to a soybean field bordering Cherry Hill Orchard (home).







We noticed stink bugs in the soybean and the apples. Even with the cool night time temperatures in September, Greg Krawczyk from PSU documented this trap catching 199 (BMSB) in 1 hour.

9-1-11 / 9-17-11 6 Night Totals  
10,000+ Nymphs Collected  
3000 Adults

CORN

APPLE

SOYBEAN

CORN

Google e

© 2011 Google

Image PA Department of Conservation and Natural Resources PAMAP/USGS

30°55'17.75" N 76°19'38.22" W elev 402 ft

Eye alt





200+ (BMSB) nymphs in each pile

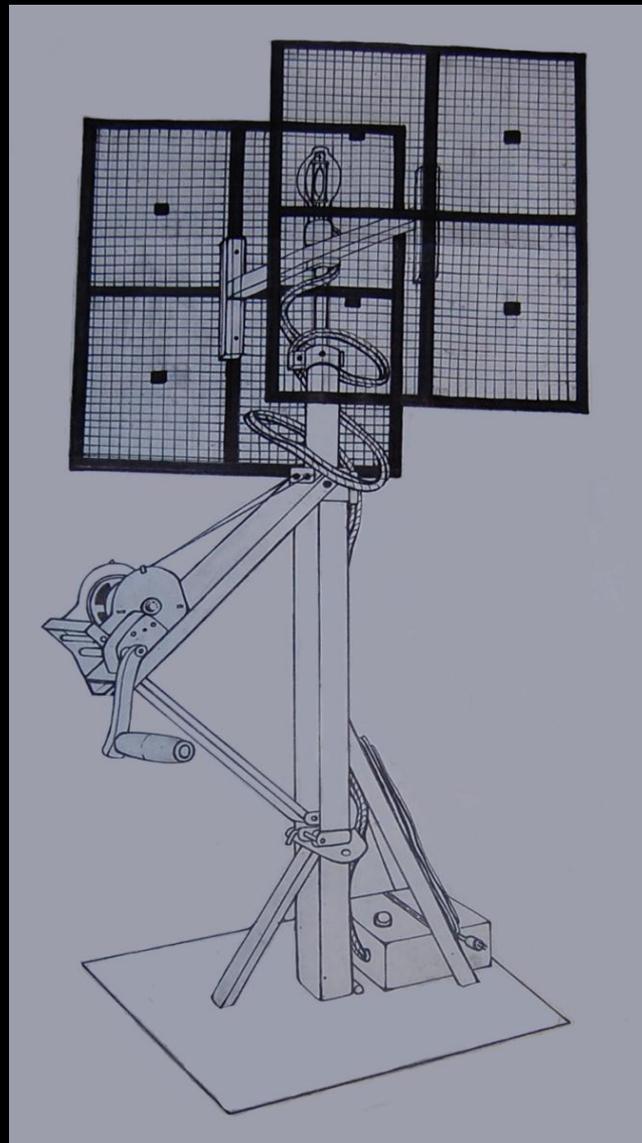


Since nymphs can't fly, we needed a non sticky nymph trap that worked, so I developed one! We caught 67 nymphs in just a few hours in this light trap with an added pheromone.





From July 12<sup>th</sup>, 2011 to Sept 12<sup>th</sup>, 2011, we estimate we caught up to 100,000 adult stink bugs on this one trap. We used 4000 feet of sticky material in our research and development.

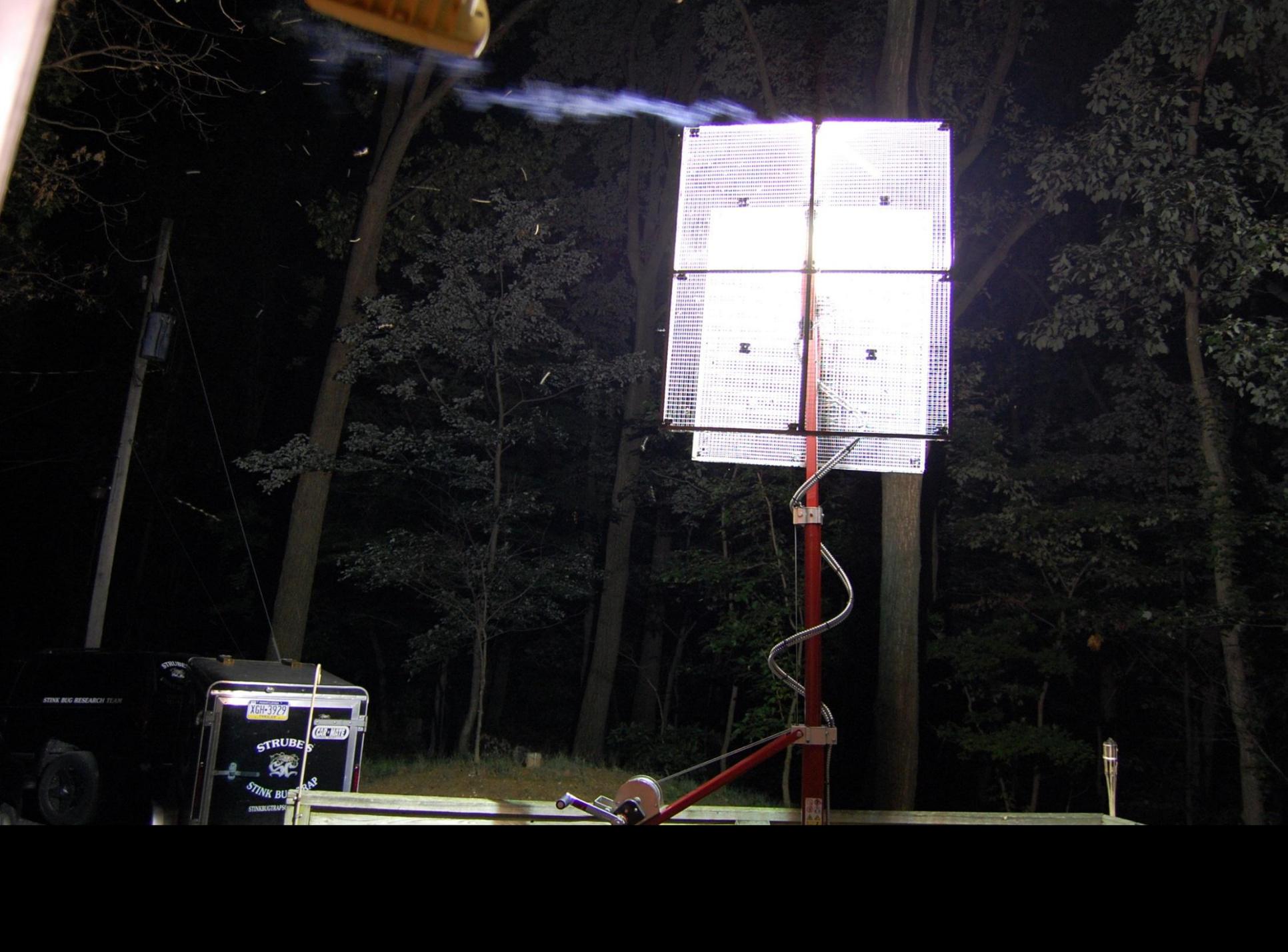


We realized for control purposes we needed something that was less work. If you have severe infestations of (BMSB,) our Predator Stink Bug Zapper is the way to go. There is no sticky panels to change. You simply plug it in, and let the trap do its job!



This trap works by electrocution, and it will fry any insect that comes in contact with the electrifying panels. It has been tested and performs just as well as the sticky trap.







The Predator Stink Bug Zapper in a gator at Cherry Hill Orchard (store).



Lancaster County, Pa Flood September 9<sup>th</sup>, 2011



Post Flood - September 17<sup>th</sup>, 2011



Monitoring Trap



a freshly molted stink bug with her first pair of wings

The Future

NEXT EXIT 

For the 2012 growing season, we will be manufacturing our Predator Stink Bug Traps in house. All traps will be built to order until we secure a manufacturer. If you need more information or would like to schedule a trial, give us a call.  
Strube's Stink Bug Traps - (717) 449-3015

For updates and new information, you can also visit our website.  
[www.stinkbugtrapsonline.com](http://www.stinkbugtrapsonline.com)



# KUDZU BUG

## Invasive Insect (Bean Plataspid) Poses Risk to Soybean Crops and Infests Homes in Southeastern States

The bean plataspid (*Megacopta cribraria*) is an invasive insect from Asia that attacks soybean and other legumes. It also feeds on kudzu, an invasive plant species that has spread throughout the southern United States.

### Threat to Agricultural Resources

Reports from China indicate that the bean plataspid can significantly impact soybean production. In China, the pest has caused springtime crop losses of up to 50 percent and summertime losses of up to 30 percent. Severe infestations on some host plants result in seed yield losses, improperly developed pods, and undersized seeds. The bean plataspid is also listed as a harmful pest of Chinese fruit trees. If it moves to other host plants in the United States, the pest has the potential to cause significant agricultural damage. Adults and immature insects (nymphs) gather in large groups and suck sap from a host plant, weakening and stunting it. Adults have been observed sucking sap from the host plant's leaves, stems, budding flowers, and mature green pods. Severe infestations of adults and nymphs feeding on leaf sap can cause extensive defoliation in host plants. As host plants die off in cooler fall weather, the bean plataspid search for places to spend the winter, settling into attics and cracks in wood siding on houses.



We have confirmation that Strube's Stink bug traps are catching "Kudzu" stink bugs in the south.

"The bug can now be found in 143 Georgia counties, all South Carolina counties, 42 North Carolina counties, and 5 Alabama counties," said Wayne Gardner, an entomologist with the UGA College of Agricultural and Environmental Sciences.

If you have a serious infestation of Kudzu bugs inside your home, our stink bug traps are guaranteed to catch them. If you experienced crop loss from the Kudzu Stink Bug last season or suspect an infestation in the upcoming 2012 growing season, please give us a call to talk about options. Strube's Agricultural Stink Bug Traps have been confirmed catching over 1500 (BMSB) stink bugs an hour. (717) 449 - 3015 or email: [stinkbugtraps@aol.com](mailto:stinkbugtraps@aol.com)

**Product Details**



Kudzu Bugs Trapped  
Atlanta Georgia  
November 28, 2011



In Spring, 2012, we will be headed south to confirm that our Predator AG traps will catch the “Kudzu” stink bug.

**Next are a few miscellaneous pictures that I took.**



We started this colony with 50 adult males and 50 adult females. There ended up being over 1000 stink bugs inside this stink bug house until a severe windstorm blew it over.







