



BUGS CREATE HUGE STINK

Local farmers expect stink bug crop damage to increase this year

By **BARB KREBS**
Daily Record/Sunday News

Local fruit growers and farmers are expecting the brown marmorated stink bug to make a pest of itself again this growing season.

Stink bugs have developed this name because they release an unpleasant odor when deterring predators or when they are crushed.

They have been around for several years in Pennsylvania, and some varieties are predatory and serve as a benefit to farmers by eating other pests that damage crops.

Others not so much.

The brown marmorated stink bug caused a lot of crop damage last year, creating a problem that is expected to grow.

Experts estimate that 10 to 20 percent Pennsylvania's fruit crop was affected by this particular pest last year according to Greg Krawczyk, extension tree-fruit entomologist. Krawczyk's office is at Penn State's Fruit Research and Extension Center in Biglerville, Adams County.

"They did a lot of damage last year. We didn't think so at first, but looking back on it, we think they did more damage than we originally thought. First, they hit the apple crop and later the peach crop," said Julie Flinchbaugh of Flinchbaugh Orchards and Farm Market of Hellam.

Flinchbaugh said she is pleased to hear the Pennsylvania Apple Marketing Board has decided to provide a \$50,000 grant to finance a study on how to deal with the stink bug.

"That is super. I am happy to hear they decided to go ahead with that," she said.

Some of their vegetables were also damaged by the stink bugs, she said.

"We don't grow sweet corn, but I know they had an affect on the crop, and the soy bean yield

was down, too," she said.

Flinchbaugh said she has heard of several ideas to help get rid of the stink bugs, but they are pretty much experimental, and she is not sure if they will work, especially on a large scale.

One idea is a light trap with a cone shape with a light inside that will attract the bugs. Once the stink bugs go inside, they would not be able to get back out, she said. Flinchbaugh said it might work for small vegetable gardens but she is not sure how it would work in a larger area, such as an orchard or field.

There also is talk of neutering the males to prevent reproduction, she said.

Her solution: "I drop them into an old water bottle where they drown, and I think soap is supposed to kill them. Some people tell me if they find them in their house, they catch them and throw them outside, but you have to kill them, otherwise they do damage," she said.

"The brown marmorated stink bug is able to feed and develop on more than 300 different host plants, making this a problem for the entire agricultural community," Krawczyk said.

Farmer William Buser of Lower Windsor Township saw some damage to corn and soy beans last year, thanks to the stink bug, but

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Stink bugs: Did you know?

By **BARB KREBS**
For the Daily Record/Sunday News

The brown marmorated stink bug came from Asia to the United States 12 years ago.

It was first collected in September 1998 in Allentown, but probably arrived several years earlier.

As of September 2010, it has been recorded in 37 counties, although it is probable that it is in all counties.

Since it first appeared in Pennsylvania, it has spread and is now seen in 29 states, as far away as Oregon in the Pacific Northwest.

Unlike bug species that are indigenous to Pennsylva-

nia, it does not have any natural predators.

It can eat and develop on more than 300 different host plants including apples, peaches, figs, mulberries, citrus fruits and persimmons, ornamental plants, weeds, soybeans and beans for human consumption.

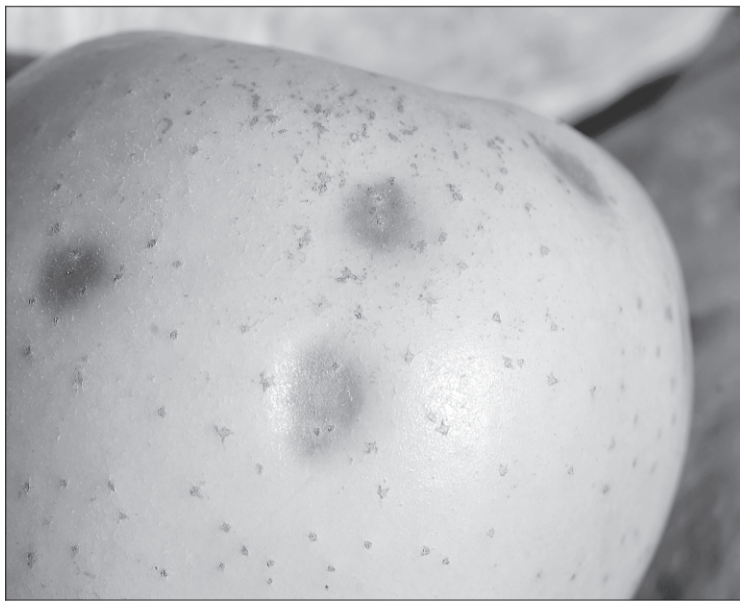
In Pennsylvania, it has caused extensive damage to apple and peach orchards and has been found feeding on blackberries, sweet corn, field corn and soybeans.

In neighboring states, it has also damaged tomato, lima bean and green pepper crops.

It has become a serious pest of fruit, vegetables and farm crops in the Mid-Atlantic region, and it is probable that it will become a pest of these commodities in other areas in the United States.

It is a nuisance pest both indoors and out when it is attracted to the outside of houses on warm fall days in search of protected,

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DAILY RECORD / SUNDAY NEWS — FILE

A Golden Delicious apple from Flinchbaugh's orchard in Hellam is covered with brown spots from the brown marmorated stink bug. Experts estimate that 10 to 20 percent Pennsylvania's fruit crop was affected by this particular pest last year according to Greg Krawczyk, extension tree-fruit entomologist.

Solution could be several years off

For apple producers in the state, the bug affected 10 to 20 percent of their crop in 2010.

By **BARB KREBS**
For the Daily Record/Sunday News

Greg Krawczyk wants to limit the crop damage caused by the brown marmorated stink bug.

Krawczyk, an entomologist, whose laboratory is located at Penn State's Fruit Research and Extension Center in Biglerville, has begun a two-year investigation into the problem, specifically on fruit growers.

The study is funded by a \$50,000 grant from the Pennsylvania Apple Marketing Board. As the stink bug population continues to increase across Pennsylvania so does the devastation that they bring to state's apple crop. Fighting the problem now will help growers minimize future crop loss, said Karin Rodriguez, executive director of the apple-marketing program.

Pennsylvania is the fourth largest apple-producing state in the country, and experts estimate that 10 to 20 percent of the state's 2010 fruit crop was affected by the pest.

They damage fruit by piercing the skin and sucking out the juices, leaving a visible mark on outside of the fruit and a dried area inside. The damaged section can be cut out and removed.

"This damaged fruit is downgraded and sold for processing or juice for maybe \$7 to \$10 per bushel, compared to anywhere from \$20 to \$60 per bushel on the fresh-fruit market. One grower whose crop has been damaged by stink bugs told me that if he has one or two more years like this one, he'll be out of business," Krawczyk said.

Finding ways to deal with this is a particular stink bug "presents a formidable challenge" because

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How to identify a stink bug

Native to Asia, the brown marmorated stink bug (BMSB) is so named because it often releases a foul odor when disturbed or crushed. Adults are gray-brown; nymphs are orange and black. Other characteristics:

Antennae
Dark and white bands along last two segments

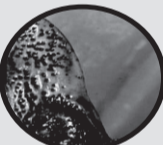
Halyomorpha halys



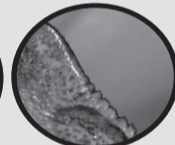
View from above

Long piercing-sucking mouthparts held under the body between the legs

Views from below



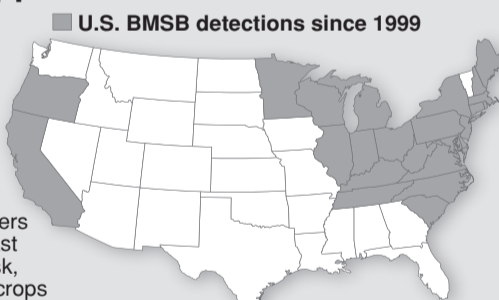
Smooth edge (BMSB)



Toothed edge (not BMSB)

Voracious appetite

Discovered in the eastern U.S. 10 years ago, BMSBs are now found throughout the Midwest and on the West Coast and likely came to North America in shipping containers; researchers have identified at least 500 host plants at risk, including most food crops



Biology

Adults stay in protected areas, including buildings, during the winter; in the spring, adults mate and females lay clusters of eggs on host plants; in the summer, all stages of the insect — young and adult — feed on host plants; in the fall, they once again seek shelter

Source: Michigan.gov, www.ars.usda.gov, pest.ceris.purdue.edu
Graphic: Kofi Myler, Detroit Free Press

McCLATCHY-TRIBUNE

Possible solution?

The USDA's Animal and Plant Health Inspection Service is evaluating four parasitic wasps that lay eggs into the eggs of the stink bug. The wasps will be in quarantine labs in Delaware over the next two years to ensure they don't have an adverse impact on other beneficial bugs.

Source: Greenhouse managementonline.com



Daily stats

	Friday's close	Last	Chg
Dow	12,810.54	12,810.54	+47.23
Nasdaq	2,873.54	2,873.54	+1.01
S&P 500	1,363.61	1,363.61	+3.13
AMEX	2,483.05	2,483.05	+8.35

Prime rate 3.25 percent
30-yr mtg. 4.70 percent

Friday's metal prices
(N.Y. Mercantile Exchange)

Gold	1,556.40 troy oz.
Silver	48.58 troy oz.
Platinum	1,865.50 troy oz.

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U.S. Department of the Treasury

Social Security to go electronic

The U.S. Department of the Treasury is phasing out the paper Social Security check by March 1, 2013.

Anyone applying for the federal benefits on or after May 1, 2011, will receive payments electronically, while those who currently receive paper checks will need to switch by March 1, 2013.

The Social Security Administration estimates about 8,565 people in York County still receive paper checks.

The government estimates the payments will save taxpayers \$120 million per year and \$1 billion over the next decade.

Eliminating paper checks is also expected to save 12 million pounds of paper in the first five years of the new system.

For more information, go to www.godirect.org or call 800-333-1795.

ERA Preferred Properties

Annual benefit auction set

ERA Preferred Properties in Hanover will hold its annual auction at 9 a.m. May 7 to raise money for services benefiting adults and children with neuromuscular disease in York and Adams counties.

The auction will be held at the Hanover Collision Center in Hanover.

Last year's event raised more than \$5,600. This year's goal is to raise \$10,000 for families served by MDA, a voluntary health agency working to defeat neuromuscular diseases through worldwide research.

To donate items, contact ERA Preferred Properties at 633-6261 or the local MDA office at 293-0685.

Local stocks: Friday's close

Company	Last	Chg	Company	Last	Chg
ACNB	15.00	-0.24	Hershey	57.71	+0.17
Banco Sant.	12.40	-0.08	Honeywell	61.23	+0.22
Bon-Ton	13.88	-0.14	Johns. Ctl.	41.00	-0.26
Caterpillar	115.41	+2.77	M&T	88.37	-0.54
Ch.&Dwight	82.48	+0.69	Metro	12.50	+0.14
Cod.Vly Bnc.	10.88	+0.41	PNC	62.34	-0.17
Comcast	26.21	+0.08	PPL	27.43	NC
Dentsply	37.55	-0.75	Rite Aid	1.11	-0.01
Exelon	42.17	-0.01	Std. Register	3.44	-0.06
First Energy	39.96	+0.15	Starbucks	36.20	-0.68
Fulton	11.68	+0.18	Susq. Banc.	9.22	-0.13
Glatfelter	13.60	+0.02	UGI	33.30	+0.13
Graham	23.00	+0.34	Wells Fargo	29.11	-0.16
Harley	37.26	NC	York Water	17.46	-0.04

YCI

The York County Index, an average of the 28 stocks listed above.
34.35 +0.07

More stocks

For more stocks information, visit ydr.com/business and use the "Yahoo! Finance" tools.