

# SCRUGGS TREE SERVICE



Tree Tips, Notes and News

WHAT'S NEW?

## HOT TOPICS

- **Stink Bugs** - read more below . . .
- **Planting Cages** - read more below. . .
- **Topping** - read more below. . .

### Stink Bugs

Got Stink Bugs!  
Chances are it's a Brown Marmorated Stink Bug

Stink bugs are shield shaped and the Brown Marmorated Stink Bug can be distinguished from other stink bugs by its speckled appearance, white stripe on the antennae and the black and white banding on its abdomen.

Stink bugs are not new to the U.S. We have long had species of native stink bugs in the U.S. but the Brown Marmorated is the newest alien invader which has no known predator here in the U.S at this time.

While previously classified as a nuisance pest and not officially classified as a tree pest, last year, 2010, the disturbing discovery of hordes of stink bugs accumulating on the trunks of landscape and nursery trees and feeding on the tissue beneath the bark may well lead researchers and "classifiers" to a different decision. Reports of the Brown Marmorated Stink Bug feeding on a wide variety of forest and ornamental trees, as well as plants and vegetables, field and fruit crops may continue to grow and lead to a more aggressive classification of this pest. Homeowners who have favorite plants, trees and bushes where the stink bugs like to congregate may well be in for a horde of unwanted guests.

While not officially classified as a “tree pest” this may well be semantics. The stink bug loves fruit. The Stink bug eats fruit. Last year alone the stink bug took a 25% bite out of the apple harvest in Pennsylvania’s highly profitable \$69 million apple industry, thereby making the stink bug a tree fruit pest. Officially or unofficially, if you are growing apple trees for the apples, and stink bugs are eating them instead of you - you have a pest.

In Asia, the Brown Marmorated Stink Bug (BMSB) is a major agricultural pest of fruit trees, citrus trees, legumes, soybeans, corn, squash, tomatoes, peppers, and more. Farmers and gardeners agree, the stink bug is a true pest. Most pests gravitate towards one crop or another. Stink bugs are not so picky. They like many different crops. Farmers and fruit growers must be on early monitoring patrol.

Several groups have joined forces and are providing thousands of dollars towards research projects in an effort to stay ahead of the stink bug invasion.

The Pa Apple Marketing Board – 2 year \$50,000 research project

State Horticultural Assn - \$54,000 research project

Pa Dept of Agriculture - \$50,000 research project

USDA’s Specialty Crop Research Initiative - \$9.6 million research grant.

Adult BMSB emerge from over wintering (most likely in your house) in Mid May/early June (although warm spring days may bring them out of hiding inside your house earlier). The adult females must feed prior to mating and laying their eggs. The adult female can lay anywhere from 250 – 400 eggs in a lifetime. Egg masses are laid on the undersides of plant leaves in clusters which contain 20-30 pale green or white eggs. The BMSB eggs are round where native stink bugs eggs are barrel-shaped. Adult BMSB have a 2 year life span. Generally, in most climates there is one generation per year, although in the warmer climates 2 generations have been noticed yearly.

Some of the other trees and plants the BMSB have been enjoying, besides apples and vegetable crops listed above, are:

Butterfly bush, Peach and Pear trees, Maple trees, Catalpa, Redbud, Yellow wood, Honey locust, Hibiscus, Tulip tree, Crabapples, Paulownia, Black Cherry, Yoshino Cherry, Lilac, Elm, Zelkova, Cleome, Dahlia and Zinnia

The seasonal buildup of the pests on these trees in your yard may well lead to the migration, when cold weather hits, into your home.

Treatment remains uncertain. Indoors there are no pesticides specifically labeled for use against the BSMB. Homeowners are strongly encouraged against using chemical treatments for a nuisance pest versus the risk to human health. Outside there are some synthetic pesticides available commercially. Check with your local extermination company. Right now it seems mechanical and physical control may be the best method.

The stink bugs do no harm to people or pets and they don’t chew on your house structure. They are though, without a doubt, unwelcome visitors. And there are reports of people being bitten. Although, that too is a hotly debated topic.

Careful removal by hand or vacuum seems still to be the best method. Dropping them into a water filled bucket seems to work well for some. Vigilance is the best defense. For every adult you kill in your home that's one less outside and if it's a female, that's up to 400 less next year.

Natural predators from China, Japan and Korea are being studied for possible importation to control the stink bugs here without harming our native species. Some of these natural predators are a tiny parasitic wasp which attacks the eggs of the stink bug. Also under development are Pheromone traps which are not yet available commercially.

[http://en.wikipedia.org/wiki/Parasitoid\\_wasp](http://en.wikipedia.org/wiki/Parasitoid_wasp)

Dinotefuran is the newest proposed weapon against the stink bug invasion. As you will see from the following links, there are varying opinions on its use and safety.

A provoking thought would be its toxicity to the honey bee. Read more . . .

<http://insects.about.com/b/2011/03/21/whats-good-for-stink-bugs-is-bad-for-honey-bees.htm>

<http://www.mnn.com/local-reports/new-jersey/local-blog/let-states-use-banned-insecticide-to-get-rid-of-stink-bugs>

<http://www.goodfruit.com/Good-Fruit-Grower/Web-2011/Clearance-sought-for-insecticide-to-help-control-invasive-stink-bug-Short-head/>

<http://www.journal-news.net/page/content.detail/id/558094/Scientists-seek-stink-bug-weapon.html>

[http://www.domyownpestcontrol.com/dinotefuran-c-114\\_371.html?gclid=COWP4v\\_CmagCFUXe4AodyW8rBw](http://www.domyownpestcontrol.com/dinotefuran-c-114_371.html?gclid=COWP4v_CmagCFUXe4AodyW8rBw)

Researchers are determined to find ways to eradicate the stink bugs.

Read more . . . <http://www.scruggstree.com/stinkbugs.html>

And more . . .

<http://www.ces.ncsu.edu/depts/ent/notes/O&T/trees/note148/note148.html>

<http://www.northeastipm.org/grants/partnership/2004/HolkoPUBaw04Prod05.pdf>

<http://www.dcnr.state.pa.us/forestry/leaflets/stinkbug.htm>

<http://stopstinkbugs.ning.com/profiles/blogs/links-to-more-stink-bug>

[http://www.ehow.com/info\\_8053910\\_stink-bug-removal-fruit-trees.html](http://www.ehow.com/info_8053910_stink-bug-removal-fruit-trees.html)

[http://www.ehow.com/about\\_5435973\\_stink-bug-habitat.html](http://www.ehow.com/about_5435973_stink-bug-habitat.html)

[http://www.ehow.com/facts\\_5220568\\_stink-bugs-description.html](http://www.ehow.com/facts_5220568_stink-bugs-description.html)

[http://www.ehow.com/list\\_7198818\\_stink-bug-pesticides-tomatoes.html](http://www.ehow.com/list_7198818_stink-bug-pesticides-tomatoes.html)

A native stink bug:

[http://en.wikipedia.org/wiki/Shield\\_bug](http://en.wikipedia.org/wiki/Shield_bug)

Similar insects:

<http://njaes.rutgers.edu/stinkbug/similar.asp>

When all else fails – turn to humor? This little article made me laugh despite the subject.

<http://www.post-gazette.com/pg/10268/1090135-458.stm>

## Planting Cages

Failure to remove planting containers and wire baskets may lead to early death.

The connection between disease, decline and early mortality of landscape trees as directly linked to improper planting methods and the failure to remove planting containers should be more widely communicated. Unfortunately, there are some who choose to debate rather than educate. It should be noted that there is no good reason to leave a basket, cage or container in place when planting a tree - while there are many reasons for their removal during planting.

Many nurseries grow their stock in containers. The advantages are that the root system is not disturbed at the time of transportation. If you purchase a container grown tree and are unable to plant immediately, keep in a sheltered location and keep the soil moist. Prior to planting a container grown tree, the roots should be pruned immediately before placing them in the ground. Root pruning will normally leave about 50% of the roots, which will be sufficient for establishment. Always remove the container prior to planting any tree.

Do be advised that container grown trees are prone to developing girdling roots. If, upon removal of the container, the tree has tightly packed roots circling around the inside of the container, it will take longer for the tree to establish itself and is more likely to develop a girdling root problem. Proper planting is one of the most critical elements in determining if your new tree will succeed or fail in your landscape.

If you don't plan on doing your own planting, you must be your own advocate when hiring someone to do that planting for you. You may find some who still believe baskets or cages won't hurt a tree. And, even some still who will argue the point.

There is much anecdotal information to prove otherwise. Planting a tree, while leaving the planting cage or basket attached, is undoubtedly easier for the laborer. Yes, this means it might even be cheaper – but, only in the short run. If your goal is to have a healthy, established tree which is an asset to your landscape, giving you many years of enjoyment, while enjoying the health and beauty it deserves, do not allow anyone to plant leaving the cage in place. The damage isn't always noticed immediately. In fact, you might not notice till 5 – 10 – 15 years later depending on tree species and type of cage.

Probably the reason some fail to recognize the correlation.

Unfortunately it has not been uncommon to find 10 - 20 year old trees sufficiently undersized and in a poor state of health due to the planter's failure to remove the planting basket.

Why subject your newly planted tree to such hazards as girdling roots, immature sizing and growth, and even premature death, as are so often the case with the stressed and weakened trees where cages and/or baskets are still in tact below grade.

It is not true that the roots will push away the baskets or other material. Sometimes the roots become entwined with the baskets and the wires girdle the roots. Girdled roots aren't healthy either.

It is not true that the wire decomposes. Occasionally some roots may be able to grow around and through, but this requires an awful lot of energy for the tree.

This is energy spent attempting to rectify the improper planting and not spent on natural growth and healthy defense mechanisms.

Don't fall for lines such as these:

"We just leave the cages on because it makes it easier to dig up the tree when it dies"

"We leave them on to promote dwarfism – so they don't get too big next to the house."

A note on dwarfism – that's a fancy way of saying: "We'll be able to plant the tree in a location where it doesn't belong". In other words, the wrong tree in the wrong location.

Here's a great graphic from Virginia Tech "24 Ways to Kill a Tree"

<http://pubs.ext.vt.edu/430/430-210/430-210.html>

And another good article from Texas A&M AgriLife:

<http://essmextension.tamu.edu/treecarekit/index.php/before-the-storm/planting-and-tree-maintenance/how-to-plant-a-tree/>

One final note –

Care should also be taken not to backfill over the root collar or mulching too heavily as both practices can be as deadly to your landscape trees as improper planting.

Trees should not be planted too deep in containers or buried in a hole too deep. You should be able to see the trunk flare. This is the spreading trunk base which connects the tree's roots. Placing the tree in an insufficient hole, then filling dirt and/or mulch over the root collar is incorrect and detrimental to the long term health of the tree.

Mulching is beneficial. It can suppress weeds, reduce maintenance and maintain necessary moisture levels around the tree. Too much, however, is too much! 2"- 4" is enough. Mulching too deeply can lead to excessive moisture levels in the root zone and root rot. Excessive mulching can lead to an increase in insect and rodent activity. Some thick mulches can even prevent air and water penetration. Care should be taken to keep the mulch away from the trunk of the tree.

## Topping

**It is Not** Arboriculture – **It is** butchery - **It is** mutilation - **It Does** create hazards!



The damage done to a tree by topping is for life! There is no turning back – no un-doing the damage. Yes, it suckers out and it looks like growth, but it isn't healthy growth and the tree never looks normal again. The tree becomes more susceptible to insects and disease, and particularly decay. Limbs weakened by decay cannot handle the weight of rapid re-growth. In a few years, if the tree survives, it may become a bigger safety hazard than it was prior to the butchery.

Read more here: <http://www.scruggstree.com/tree-topping.html>

Would you like to receive your newsletters via email? Includes hot links to in-depth on-line resources. Visit us at [www.scruggstree.com](http://www.scruggstree.com) to sign up. Just follow the newsletter link.

May we contact you by email? Be sure to leave your email address when you call.

**610-458-1960**



**610-436-9372**

email us at: [questions@scruggstree.com](mailto:questions@scruggstree.com)