

**Odds and Ends**

According to Columbia University researchers, Asthma rates in children ages four and five fell by 25% for every 343 trees per square kilometer.

BBC

The Lancet published a study that concluded that even tiny green spaces near where people live made a big difference to their risk of fatal diseases, especially heart disease and stroke.

BBC

Research at the University of Illinois concludes that trees reduce domestic violence and child abuse.

SLDT

At last word, the site of the National Champion Red Oak is in North Carolina's Great Smokey Mountain National Park.

It is 134' tall and 81' wide, with a trunk circumference of 257" dbh.

That's over 21 feet around.



**Bad Bad Beetle**

One of the nastiest little bugs to come along in a long time is the Ambrosia Beetle. There are really several genus of beetle that fall into this category. They eat a fungus that grows on the walls of their tunnels, ambrosia.

You first notice a BB size hole on the north or northeast side of a tree.



You may see a little frass, or even a small shaft of frass sticking out of the hole. If you dig into the trunk, depending on the time of year, you may find galleries, often with larvae inside.



Activity begins early in the spring when females emerge to find and enter new trees. In the specimen tree nursery, we noticed that second year trees were a favorite. The

female bores a gallery, deposits the fungus and lays a brood. The larvae feed and reach adulthood in about two months. The new female adults can breed with their brothers and then emerge to infest another tree. In some climates it is possible to have two generations a year.

Since there are several genus of Ambrosia Beetle, emerging times may vary, and in the spring and summer there may be several waves of adult beetles out and about.

The most useful tool in fighting Ambrosia beetle is the pheromone trap. By regularly monitoring the trap, you can tell when the adults are present and spray. Pyrethroids are preferred because of their long residual.



In the specimen tree business we always thought that a tree with one shot hole was a cull and had to be burned. Now it's not on any chemical label, but we think that the tree could be saved if , using a

syringe, you could fill the hole with an appropriate chemical. The shot hole should grow over pretty quickly if the beetle is dead.

While the beetle is not a problem in the bare root nursery, in specimen trees it prefers second year trees but it is by no means limited. There are varieties such as Koelreuteria which are attacked the first year. Mature trees can also be infested. As to variety, we noticed that Platanus was always preferred, but the list of host trees is long and varied, including Oak, Cherries and Plums, Styax, Pear and many others. We have even seen a shot hole in a bamboo stake, which may be how it immigrated from Asia in the first place.

If you don't have Ambrosia beetle now, count your blessings, but keep your eyes open. She seems to be making the rounds. Odd how we didn't have these invasive species problems when Chairman Mao wouldn't have anything to do with the West.