

BADGER NEWS

A PUBLICATION OF THE BADGER BONSAI SOCIETY

MEETING - AUGUST 13th 2009

6:30pm -??pm

Milwaukee State Fair

Horticulture Building

State Fair Park, Milwaukee

MEETING AGENDA:

View and critique Bonsai on display, observe the judges critiques made earlier that day and try to see what they saw.

President's Message August 2009;

First I would like to thank Melba and Ralph for opening their yard to the rest of us to admire. Those that attended had an enjoyable evening the mosquitoes for the most part were very tolerable. I would also like to thank Devon for bringing a tree for us to review and give our opinion on what steps he should consider next in its development. This may be a new tradition that the club may want to consider for the future, use our July meeting night to visit a member's collection, to see how others keep their trees.

On to the August meeting, again we are trying something new to expand our member's bonsai experiences. Instead of meeting at Olbrich, we are taking the show on the road to the Wisconsin State Fair. Specifically we will meet at the Horticulture building to view the trees that will be on display. We will review the comments that the judge has issued for each tree and discuss the merits of the trees and what makes them special and what might be done to make them even better.

The plan will be to meet at the Horticulture building about 6:30 PM. Some of the members are going to carpool from Madison, contact a fellow member and make your own arrangements. One suggestion is to use the "Park and Ride lots" to park your car and a bus will drop you at the main entrance to the Fair, or you can park on the grounds or in the surrounding neighborhoods.

We are looking for 2 or 3 members to "tree sit" during the afternoon shift from 2PM to 6PM, if you will do this you will be rewarded with free tickets into the Fair. Please contact me if you are interested and I would need to know by July 31st so that I can get the tickets to you in time. Your main duty during that time is to talk with the general public that is viewing the display and make sure nobody harms the trees on display and do not worry that you think you do not have enough knowledge to answer questions. Believe me you usually do, most questions are what type of tree is it and how old is it, occasionally they get more detailed but often those are the questions and all the answers are on the tags by the tree.

If you cannot tree sit during that time the Milwaukee club is always looking for volunteers to fill any of the three shifts each day of the State Fair, let me know which day and what time you would like to tree sit and I will get in contact with the coordinator and try to get you hooked up for tickets to the fair. The shifts run 10AM-2PM; 2PM-6PM; 6PM-10PM; from August 6th to the 16th.

And finally for September meeting we will return to Olbrich at 6:30PM to have another general workshop to work on trees of your choice. You could bring back the trees you started in the June workshop or any other tree you wish. We will also look at the tree that we started air-layers in one of our previous meetings. These should be ready to be separated from the mother tree.

That is all for now see you at the Fair, August 13th 6:30PM; Horticulture Building

Devon took some photo's during last month's meeting at the S's, a special thanks for allowing us to visit your trees.



Summertime is a time for the insects, and since there are quite a few detrimental to the world of bonsai I have found an article on aphids you might find interesting. I will condense the article for this newsletter. If you want to read the full article and view all the photos you can go to www.knowledgeofbonsai.net and view it there.

A Closer Look: Bonsai Pests- Part 1- Aphids

by Heather H



Aphids are a ubiquitous garden variety pest in temperate regions, as irritating on our tomatoes as they are on our bonsai. Also called plant lice and greenflies, aphids number over 4,000 species ranging in size from one to ten millimeters in length. Soft bodied, tiny, and destructive who feed on the soft parts of the plants.

Aphids cause damage to plants in two ways: by feeding off of the the sap of the plant, and by potentially introducing viruses to the host plant. The first is easier to deal with by dealing with the infestation . And I assure you, if you see a couple aphids now, **deal with it**, rather than waiting. A couple aphids might not do much, but if they like your tree, they will reproduce, and **QUICKLY**.

Aphids have soft bodies, range in color from green, yellow, brown, black and pink. Some may appear waxy or woolly. Their bodies are squat, and frequently pear shaped. They have two compound eyes, and six segmented antennae. They feed with sucking mouthparts, They have long, thin legs compared to their squat body shape and size.

Some species of aphids feed only on one species of plants, most are not so selective. They are passive feeders, this means rather than sucking out the sap of a plant, they use their mouth parts to puncture the phloem of their host plant, letting the natural pressure within the phloem force the sap out to them. Since the sap of most plants is relatively high in sugar (a product the aphids don't need much of) and relatively high in nitrogen (something aphids need allot of), they frequently give off a waste product known as "honeydew", drops of sweet liquid containing the sugar they don't need. Ants on a plant can frequently be an indicator of an aphid problem, as ants are attracted to the honey dew. Some species of ants will even "herd" aphids as food sources, moving them to new plants and protecting them from predators. When host plant quality becomes poor or conditions become crowded, some aphid species produce winged offspring (known as alates) that can disperse to other food sources.

Aphids give birth to live young, called nymphs. At least, some do, others lay eggs. There are also some species that can reproduce asexually, which considering how invasive these things are and the fact that they can be spread via the wind, goes a long way toward explaining why this family of insects are so darn pervasive. Most aphids reproduce rapidly when conditions are right. In the spring and summer the females (asexually) give birth to live young (all female), some of which may have wings to help them spread. At the end of the summer, males and females are produced, and eggs are laid and fertilized from this generation which will hatch the following spring. But in a warm situation like the tropics or a greenhouse, female aphids can reproduce for years.

HOW DO YOU KNOW IF YOU HAVE APHIDS

If you have an infestation, you'll be able to see them. You can also look for ants that are traveling up your plants (they look like they are on a mission, which is pretty accurate). Honeydew, the sweet liquid excreted by the aphids is another sign. Black molds can grow on the honeydew, but they are generally considered harmless. Aphids leave pretty distinctive signs, even besides themselves. Leaves in an infested part of a plant will often look wrinkled or folded, even outright distorted. Aphids feeding on the base of a leaf will cause the leaf to curl backward, folding over them. Flower buds may be damaged or fall off completely. Some species of aphids will form a gall (an abnormal lump on a branch) and live inside of it, to help protect them from predators. You may also see yellow, stunted growth, wilting, mottled and brown foliage. Beside the weakening caused by the removal of sap, some aphids' saliva is actually toxic to the plants they feed on.

APHID PREVENTION

The best prevention for aphids is healthy, happy plants. When plants aren't stressed, they have better defenses against infestations. Keep a good distance between your trees to keep good airflow, adequately water your bonsai, and make sure they are getting the right amount of light for their species preferences. Don't over fertilize. Chemical fertilizers high in nitrogen produce large amounts of just the right kind of growth that attracts aphids. Slower acting, organic fertilizers are better for helping prevent these infestations. While we go for good growth in our trees, this is another reminder for us that balance is the key to all things in bonsai. Aphids can also thrive in thick inner canopies of trees, so keep your trees from getting too over grown in the interior. Allowing light and fresh air to penetrate will help prevent other diseases as well. There are also some studies that have been done using reflective mulches (silver coloured polyethylene sheets) to help prevent aphid infestations, though I'm not sure if anyone has tried them in bonsai cultivation. Keep new plants isolated for a week or two before putting them near your other bonsai. This way, if there is an aphid problem you may have over looked at purchasing, you have a chance to catch it before it spreads to your other trees.

APHID REMOVAL

If despite your best efforts, you notice an aphid infestation on one of your trees, don't panic! There are several steps you can take, ranging from the simple to the more complex.

The simplest, and cheapest way to deal with a mild aphid problem is to spray the entire plant with a strong burst of water to knock the aphids off. Make sure you get everywhere, especially the bottoms of the leaves and branches where the aphids might hide. Remove any leaves that have curled in on themselves, as aphids will hide in these as well. Don't just knock them on to the soil beneath your benches though, as they will just come back. Find someplace out of the way or over a drive way where you can then wash the whole thing down again. Spray your plants early in the day so they have a chance to dry and you can check them again in the afternoon. A solution of soapy water can also be used to wash over the entire plant.

My personal favorite (a preventive measure I take almost every year anyway) is to release insects that feed on aphids in to my garden and among my bonsai. The most common are lady bugs, though there are also types of parasitic wasps, aphid lions, crab spiders, syrphid flies and lace wings among others. These beneficial insects will stick around as long as there is food (i.e. APHIDS!), but you can encourage them to stick around longer by planting certain things that attract them (yarrow, cilantro, parsley and sweet alyssum are all plants that lady bugs in particular like). Lady bugs can be purchased at most garden centers now, as an alternative to chemical pesticides. If you are going to try beneficial insects, make certain you don't use any pesticides, as these will kill the good bugs as well as the bad.

Insecticidal soap or neem oil can be used, and is generally safe for bonsai, but check the label, and if in doubt, do a test on a small portion of the plant to be certain it does not cause an ill effect. An even coat that gets every part of the plant (especially the underside of the leaves!) is necessary. These only work on contact, and do not provide long term prevention. If a spot is missed on the plant, the infestation can balloon again once the oils have dried, and applications may need to be repeated. Do not use oils on water stressed plants (those that have been under watered and have wilted, or those that have been over waters and may have root rot), or if the weather exceeds 90F (30C), as this can harm the plant. Supreme- or superior-type oils will kill overwintering eggs of aphids trees if applied as a delayed dormant application just as eggs are beginning to hatch in early spring. These treatments will not give complete control of aphids however, and additional controls may be needed later in the season. Earlier applications will not control aphids.

There are also many other, stronger insecticides available for aphids (malathion, permethrin and acephate to name a few). Some of these are safer for bonsai than others. Especially if a certain tree is hit consistently by aphid infestations, a systemic pesticide might be worth considering. Maples and Elms in particular can be susceptible to repeat attacks. There are so many kinds available it is hard to go over all of them. General guidelines are to follow the instructions on the bottle for usage, including timing and dosage. If in doubt, test it on a small area of the tree. If there are no negative affects (dying leaves, blackening bark), you can probably proceed with the rest of the tree. If you can, however, avoid the use of diazinon and chlorpyrifos; beside diazinon being dangerous for a few species we use for bonsai, both have been identified as serious sources of pollution in lakes and rivers. Carbaryl is not recommended because it is not very effective against aphids. In general, check the labels and see what pests they are effective against.

Keep in mind that if you see ants in conjunction with the aphids, you also have to deal with the ants, as they will simply re-infest the plant. If they have made a nest in the pot itself, repotting and making sure to remove all of the old soil is effective. There are also some insecticides useful against ants, but many are not, so be certain to read the labels. Smaller garden centers can often lead you in the right direction for which pesticides will be the best for your area.

On large, landscape trees, Aphids are seldom a problem. But on small bonsai with limited roots, they can weaken a plant quite a bit, and even lead to death if not taken care of. While it may seem simple, or even not very worrisome if you see only a couple aphids, whether on a bonsai or another garden plant, early reaction and prevention are your best defenses again a full blown infestation.

Heather H

www.knowledgeofbonsai.com

Go outside and check your trees now is the time for infestations. It does not take many bugs to do serious damage to our small trees. This morning I was watching the news and sunlight was coming in through our front window and I noticed small dark spots on the underside of the leaves of my Scheffelera, reflection of the sunlight through the leaves. Upon closer inspection there are a number of scale present. This is an infestation I am going to have to address and soon. So check your trees. Don't forget to find some way to get to the State Fair August 13th and view some great bonsai with us.

Greg