

BONSAI NEWS

A Publication of the Badger Bonsai Society

April 2003

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President's Message

The Milwaukee Bonsai Club have invited Warren Hill to their May meeting. Warren will be doing a demonstration of Trident Maples in a grove. I would like to ask some of our members to attend as Warren is noted for his maple groves. The demonstration will be held on May 6th at 7PM.

We can discuss travel plans at our April meeting, or you can contact me by phone or email.

The April Meeting will be a Bring Your Own Workshop. This would be an ideal time to bring in any bonsai that you may want to take to the show in May.

Please bring plastic to cover your workspace, in addition to your tools, wire and potting mix, if you will be repotting. *Bob*

NEXT MEETING:

THURSDAY,
April 10, 2003
7:30 P.M.

OLBRICH GARDENS
3330 Atwood Avenue
Madison, WI

(Suggestions for) What To Do In April

by Jim H

You should start to bring your bonsai out of their winter storage and place them on their benches. Sometimes you will find an excessive amount of moss. If moss covers the entire surface of the soil it will limit the flow of air and moisture to the root system and must be thinned. If moss is growing up the trunk of your bonsai it must be removed. Failure to remove moss on the trunk can be fatal.

Some bonsai experts clean the trunks of their bonsai in the spring. Take an old toothbrush (or borrow your spouse's toothbrush), dip it in a mild soap solution, and gently scrub the trunks of your smooth barked trees. You will remove dirt, bugs, fungi, and moss and at the same time stimulate the tree.

Inspect each of your bonsai carefully and be especially alert for old wires. Remove all old wires. If old wires are not removed the bark can be permanently scarred because of the rapid growth of branches and the trunk in the spring. After you've removed the wire if the limb does not hold the desired position you will have to rewire the limb.

REPOTTING A bonsai is, by definition, confined to its container. At some point the tree will fill the container with roots and become pot bound. Air, water and nutrients will not be able to penetrate the root ball of a pot bound bonsai. The tree will suffer and without some action being taken it will die. When should you repot? The answer depends on the age and species of tree, the size of the pot, and most importantly the health and vigor of the tree. But, as a rough guide, younger bonsai are usually repotted

every one or two years and older trees less frequently. [Editor's Cut]

When repotting, let the soil become somewhat dry. If the soil is dry, it is easier to repot the tree and root damage is minimized. If you are potting a tree for the first time in a bonsai container it is a good idea to use a container that is somewhat large. The health and survival of the tree is improved if the tree is potted in a container larger than the size you ultimately want. The larger container has more soil which minimizes the shock from transplanting. When repotting, I use some Osmocote in my soil mix. Osmocote is a slow release fertilizer that releases its nutrients over a three month period.

WATERING Water your trees when the surface of the soil feels dry to the touch. Continue watering until the entire root ball is moist. Don't water again until the soil surface feels dry again. Your soil should not be bone dry (complete absence of moisture) and is unhealthy for any tree even for junipers and pines (which prefer their soil to be somewhat dry). A moist soil is the safest and most desired condition for most plants. After moist, a soil becomes wet which can be tolerated by few trees. If your soil is always wet, check for poor drainage, non-functioning roots, and review your soil formulation.

COLD WEATHER If your bonsai are in leaf and we have a sudden cold snap you must provide your trees with protecting from frost. New growth is very tender. A sudden cold spell will not only kill the new growth but can damage new root growth.

Borrowed from the Cincinnati Bonsai Newsletter at www.cinninatibonsai.com

Pest Management

A Brief History of Pesticides

by Carolyn C

Brief history of Pesticides

1920s and 30s

- There was a technological and chemical revolution in all areas.
- Research led to the development of chemical pesticides and fungicides (DDT: 1939)

1940s and 50s

- Huge increase in number of pesticides available.
- Chemicals were thought to be the miracle cure for all problems.

1960s

- Rachel Carson wrote *The Silent Spring*--the first widely read warning of pesticide overuse.
- Realized the critical link of insects in the food chain
- Began searching for the more natural remedies of our ancestors

1970s

- Came up with the concept of IPM--Integrated Pest Management: instead of annihilating the insect population -- manage the pest

1980s

- Development of softer insecticides -- less harmful to beneficial insects and environment.
- Lots of research on low rate materials (1 oz/active ingredient per acre rather than 2lbs.)

1990s

- Lots of focus on development of biorationals -- materials based on some type of biological insect hormone or venom -- things found to poison insects -- and then synthetically reproduce those things. Plants have defense mechanisms -- exploit those. (cayenne pepper extract, plant material extracts, etc.)
- Chemicals that disrupt pest behavior not kill them (pheromones

are chemosterilants). Pheromones are insect hormones.

- Spot treatments -- treat only infected areas.
- Scout your area to determine threshold levels -- how much damage can you withstand before you need to take action manage pests, but allow beneficial to exist

Prior to 1960s pesticides had a pretty good reputation. Due to mosquito transmitted diseases, the French lost 30,000 people in the 1800s trying to build the Panama Canal. Americans finished the project in 1914. The Bubonic Plague is credited for killing over 65 million people -- transmitted by fleas on rats. It is estimated that Malaria has killed over 200 million people over the course of history -- and up until 1939, killed 6 million people per year.

If it weren't for herbicides, we would still have 10-12% of the population working on farms, rather than the 2% to produce enough food to sustain the U.S. population. Globally, one third of crops are lost due to pests, and in Latin America 40% of everything is lost due to weeds and diseases.

When an actual new chemistry comes along, it takes 15 years to develop it and about \$20 million.

Overall Conclusion:

Pesticides are indispensable for feeding, clothing, and protecting the world population from diseases and discomfort. Pesticides are one spoke in the wheel that makes up IPM.

Less than one-half of one percent of all insects are considered pests of plants

The Seven Principles of IPM -- Integrated Pest Management

- 1. Physical / Mechanical:** oldest method, hand picking, traps, fences, screening, etc.
- 2. Cultural:** sanitation (remove leaf litter, keep garden and work area clean), fertilization, proper planting, etc.
- 3. Genetic:** choose resistant plant varieties
- 4. Biological:** use beneficial (ladybugs, lacewings, parasitic wasps, etc.) or harmless organisms to control or suppress pests -- encourage by not spraying
- 5. Behavioral:** synthetic chemicals to attract, repel, confuse, or inhibit pests (pheromone lures)
- 6. Regulation:** legal control -- certification, inspection, quarantine (prevent entry or eradicate in limited area)
- 7. Chemical:** specially designed chemicals to kill or harm pests -- last resort

Terms

◆ **Broad-Spectrum Insecticides:** destroys many pests in many situations. Diazinon is one such broad spectrum, eliminating over 100 different pests, including aphids, mealy-bugs, mites, and flea beetles.

◆ **Specific Insecticides:** designed to control only one or two particular types of insects. For example, dicofol was designed to kill only mites and will not affect other pests.

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Tree of the Month: Trident Maple

Acer Buergerianum

by Bonsai Bob E.

The trident maple makes a great bonsai due to the small, three lobed leaves, and a thick trunk, gnarly roots which do very well as root over rock.

Family: Aceraceae

Lighting : Tridents do well in the sun as well as in partial shade. I have found in the heat of summer up here you want to place them out of the hot afternoon sun.

Temperature : It is claimed to be hardy in zones 4B to zone 9 but the roots have a high moisture content and are susceptible to root damage if exposed to frost. This is a fatal problem or at least a lot of winter dieback. Trident will need careful winter protection. A suggestion is to use *Acer ginnala*, the Amur maple, in

our area. Amur will tolerate much colder temperatures but they still need winter protection.

Watering: Water moderately in summer, and ease off in the winter, but do not let them dry out completely.

Feeding: Fertilize every two weeks in the growing period. More frequent feeding will increase pinching back. using a liquid fertilizer be sure not to spray the leaves, as this may burn them.

Pruning and wiring: Pinch back new growth to the first two leaves. Wiring may be done at any time during the growing period, it is a lot easier to wire before the tree is in full leaf. Be careful to keep a n eye on it because it grows so fast that the wire may cut into the bark. Leaf pruning may be

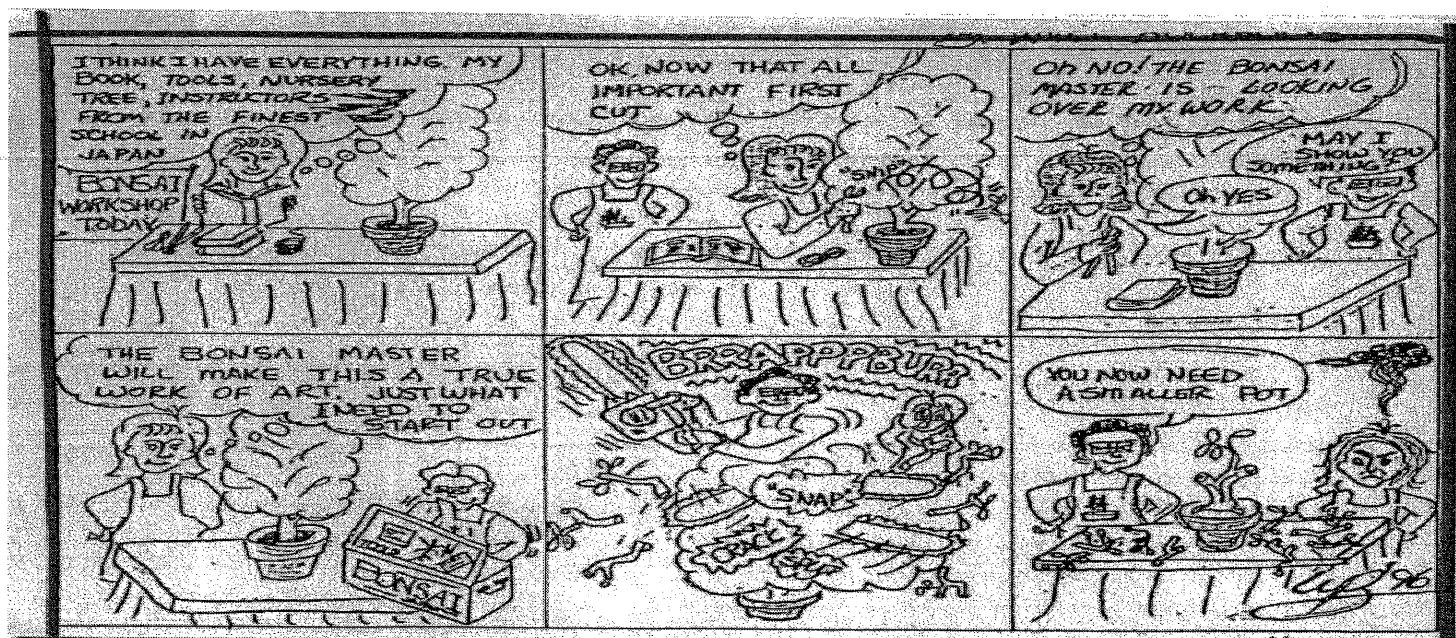
done in mid summer to reduce foliage. Total leaf pruning should not be done every year, the tree needs time to restore energy.

Propagation: Tridents may be grown from seed, air-layered, and from cuttings.

Repotting: Repot in the spring before the buds open. Roots grow very quickly, so annual repotting is almost a necessity for younger trees. Sometimes you will get root dieback during the winter, so trim back the dead roots to give room for new roots to grow. As is the case with most bonsai, a well-draining mix should be used.

Pests and diseases: Generally pest- and disease- free.

Does This Remind You of Anyone?



2003 CLUB OFFICERS

President - Bob Es
Vice-President - Mary J
Secretary - Joan J
Treasurer - William A
Librarian - Greg J
Refreshments - Elaine V
Newsletter - Karl J and
Lisa J
Webmaster - Eric J

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- ◆ **Systemic:** is absorbed by the plant and moves throughout the whole plant; therefore, can kill any pest feeding on any part of the plant (Orthene, Avid)
- ◆ **Contact:** Does not penetrate plant tissues, just kills any pest that feeds

on plant tissue that have been sprayed (Malathion, Sevin)

- ◆ **Selective:** More toxic to certain types of plants or animals (Kelthane for mites)
- ◆ **Non-selective:** Kills everything it touches. (Roundup/herbicide)
- ◆ **Phytotoxic:** harmful to plants

Pesticide Safety

READ THE LABEL -- THE LABEL IS THE LAW.

Choose Wisely -- ID your problem
Choose the least toxic option
Buy only what you need

Mixing is the most dangerous time (when handling the concentrate) -- wear rubber gloves. Keep pesticides downwind of the mixer, and below

eye level. Mix only what you need (Loses effectiveness after mixed). Put the water in first, then add the chemical. Always follow the recommended rates. Do not eat, drink, or smoke while mixing or spraying. Spray out anything left in the tank on plants. Triple rinse sprayers, reapplying rinse to labeled site. Never pour down sewer, drain, or directly onto ground. Follow label for disposal of empty containers. Clean up Body (hair and neck), clothes.



BONSAI BOB'S

MADISON, WI.

BONSAI

TOOLS

SUPPLIES