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Grandmother from page 70

football field is seeded, not sod. Baseball fields have been renovated.

Bird rents aerators, fertilizer spreaders, grasscatchers and electric rakes. The district owns three tractors, one pick up truck and two buses which have been overhauled to use as maintenance vehicles.

"I encourage districts to use buses for utility vehicles," Bird said. "We've taken all the seats out and can store and haul whatever we need to the location we're working on. You can't buy a truck for $1,200 to do it. I've found this is the way to earn respect."

Bird says she's going to school "to learn what I already know." She attends Wayne County Community College two nights a week working toward her Associates Degree in business administration. She is on the Dean's List.

Bird says her background as a homemaker and growing up on a 10-acre farm has given her the background to be able to fix and do things for herself, using common sense and experience. She has, however, conceded some operations to technology.

It is Bird's hope that some day her budget will match her future plans for Woodhaven, making it one of the most eye-pleasing and landscape-efficient districts in Michigan.

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Circle No. 138 on Reader Inquiry Card
JUNE JOB FOCUS
1. Insect Control
2. Disease Control
3. Trimming

June makes a transition in the landscape from the panic of spring construction and maintenance to a growing season with predictable problems and more preventative maintenance. Insect concerns of June include scales, June beetles, and borers. The abundant supply of spring moisture is rapidly changing to a landscape that needs irrigation, our rhododendrons should be protected against Phytophthora, and early shrub pruning, or shearing, can commence.

INSECTS
June is a month where many scale insects can be controlled in the crawler stage. This crawler stage is the most vulnerable and easy-to-control period during the life cycle of scale. One should first be on the lookout for heavy infestations. If they are apparent, then control means should be considered. Several symptoms of heavy scale infestation, include honeydew dropping on the ground under the tree with the resulting sooty mold build up and stunted new growth. The scale insects that often warrant control (if of significant populations), during early to mid June, include San Jose Scale, Euonymus Scale, European Elm Scale, and Putnam Scale. During mid to late June the crawlers are active for Lecanum Scale, Cottonty Maple Scale, Golden Oak Scale, and Pine Tortoise Scale. These sucking insects can easily be controlled with old insecticides, e.g. Malathion or Diazinon, or many of the newer insecticides appearing on the market today, e.g. Ficam or Orthene. Your state Cooperative Extension Service should be the source for currently approved and recommended pesticides.

With drier weather and higher temperatures, mites, e.g. Honey Locust Mite, Two-spotted Mite, and Spruce Mite, can become a serious problem quickly. These sucking insect-like animals suck juices from the foliage on spruce, junipers, other evergreens, and a wide range of deciduous trees. The plants quickly take on a reddish-brown color. The best pesticides to use on mites include either ovicides, that is a miticide that controls both eggs and adults, or relatively long-lived miticides, such as Plictran.

Borers can most effectively be controlled during the month of June. Although many borers attack only weakened or recently transplanted trees, one should be on the alert for these insects. Four devastating borers which should be looked for and controlled, if necessary, include Flat-headed Apple Tree Borer, Bronze Birch Borer, Dogwood Borer, and Maple Petiole Borer. Although there are several materials that can be used, one particularly effective and generally recommended pesticide is Dursban. Two unique, yet devastating, insects that can best be controlled in early June, causing damage in significant ways, include June Beetle adults and Black Vine Weevil. June Beetle is capable of defoliating deciduous trees. One should be on the alert to the build up of this significant problem and spray as population and damage warrant. Black Vine Weevil is particularly devastating on yews, a backbone shrub of many midwest and northeast landscapes. With the new pesticides, Orthene and Ficam, control of this insect during early June is quite possible. Control is particularly important as the adults feed on the foliage while the immature larvae destroy the root system. Symptoms are plants with poor vigor and little or no growth (also symptoms of high water tables).

DISEASES
Phytophthora cinnamomi on rhododendron starts appearing as a significant problem in June with the higher temperatures. It is particularly devastating on the Caroliniana Rhododendron types and many of the deciduous azaleas. This problem has been noted with plants grown south of New Jersey for many years, but with increased use of rhododendrons and current production practices, this disease is appearing on particularly susceptible cultivars in nurseries as far north as Boston or northern Ohio. Control is particularly easy with the new CIBA Geigy compound, Ridomil (Subdue). This fungicide, applied as a soil drench, should control this particularly troublesome problem. Hawthorn has had problems with fireblight and rust. By the use of Lavalle Hawthorn (x Crotoguus lavallei) or Washington Hawthorn (C. phoenopryum), one can reduce the need for spraying. These types of hawthorns are well suited to the urban landscape, street or park tree, commercial landscape, and the home grounds.

TRIMMING
Evergreen trimming, or pruning, should commence in early spring during June and extend during July. Not only is this a time that junipers and yews are most easily pruned, but it is a period when the landscape log, or maintenance schedule, is lightening up. Further, shaping, dwarfing, or increasing the density of pines could be most readily accomplished during June as the candle growth is 1/2 to 2/3 extended. You can remove 40-60% of this new candle growth by shearing, with the end result—compact, dense new growth.

As June dries out, irrigation is of greater concern. The increased irrigation and regular mowing certainly takes center stage, with other time spent in observing the landscape and controlling the problems as they appear.
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PROBLEM SOLVERS

By Balakrishna Rao, Ph.D., and Thomas P. Mog, Ph.D.

Q: How much grade change can a tree withstand? Does this include mulches? (Pennsylvania)
A: Grading or other activities that cover tree roots can cause root mortality. The root system of trees is more extensive than many people realize. The roots of an open-grown shade tree can easily fill a circle as wide as the tree is tall. This fact is often overlooked when constructing buildings and parking lots, laying drain tiles or burying lines for utility services. These activities disrupt the soil profile. Topsoil is removed or buried; subsoil from the B-horizons is brought to the surface, pushed and piled on top of tree roots.

There are no steadfast rules, only guidelines, as to how much fill or grade change a tree can tolerate. Six inches of heavy, poorly drained subsoil covering the roots can kill an established tree.

There are no steadfast rules, only guidelines, as to how much fill or grade change a tree can tolerate. Six inches of heavy, poorly drained subsoil covering the roots can kill an established tree.

One inch of fill kills some roots, but not necessarily the tree.

It is true that mulches cover part of the root system but no one would use subsoil as a mulch. Assuming that an acceptable material is used, mulching to a depth of one to six inches should not harm the tree. The thickness will depend upon factors such as the size of the tree, the health of the tree and the nature of the mulch. The best advice regarding grade change is—don't do it. If you must change the grade around trees, seek professional advice from an arborist or landscaper before, not after, the grade change is made.

Q: What is the latest information on the gypsy moth situation and what can we expect in 1983? (Maryland)
A: Gypsy moth is present in 32 states. According to the Federal Animal and Plant Health Inspection Service, total defoli-
GET TOUGH on Cut Worms Chinch Bugs Sod Webworms Billbugs, Grubs and Many Other Insects

compete with the algae. Improve air circulation, if that is a contributing factor, by pruning tree branches. If desired, apply copper sulphate as a dilute solution at 2-3 oz. in 4 gallons of water per 1000 square feet. After the algae die, the application of 2-3 lbs. per 1000 square feet of hydrated lime will act as a desiccant and help adjust the pH, discouraging algal growth. Often fungicides like Mancozeb or Thiram, used for disease prevention, also provide adequate algal control.

You may have to overseed large bare spots and maintain good cultural practices to avoid future algal problems.

Balakrishna Rao is plant pathologist and Thomas Mog is pest management specialist for Davey Tree Expert Co., Kent OH.

Questions should be mailed to Problem Solvers, Weeds Trees & Turf, 7500 Old Oak Blvd., Cleveland, Ohio 44130. Please allow 2-3 months for an answer to appear in the magazine.
Western Chapter of the International Society of Arboriculture 50th Annual Meeting, Anaheim, CA. May 10-14. Contact Mel Sease, Western Chapter, ISA, PO Box 7308, Riverside, CA 92513, (714) 780-8464.

Southern California Turfgrass Council and University of California Cooperative Extension Turf and Landscape Institute, Anaheim, CA. May 23-25. Contact SCTC, 1000 Concha St., Altadena, CA 91001.

Turf Landscape Meeting, University of California, Riverside, Anaheim, CA. May 24-25.

Annual Convention, Kentucky Cemetery Association, Louisville, KY. June 9-11. Contact Lewis C. Tingley, Resthaven Memorial Park, P.O. Box 18068 Louisville, KY 40218, (502) 491-5950.

California Association of Nurserymen Nursery Field Day, Research Reports, University of California, Riverside Campus, July 7. Contact CAN, 1419 21st St., Sacramento, CA 95814, (916) 448-2881.

Aquatic Plant Management Society, Inc. Annual Meeting, Duch Inn, Lake Buena Vista, FL. July 10-13. Contact APMS, PO Box 16, Vicksburg, MI 39180.

American Sod Producers Association Summer Convention and Field Days, Atlantic City, NJ. July 11-13. Contact Bob Garey, Executive Director, 9th and Minnesota, Hastings, NE 68901. (402) 463-4683


University of Illinois Turfgrass and Ornamentals Research Field Day, Ornamental Horticultural Research Center, Urbana, IL, July 27. Contact Dr. Dave Wehner, 1707 S. Orchard, Urbana, IL 61801. (217) 333-7848.

Central Plains Turfgrass Foundation-Kansas State University Field Day, Manhattan, KS. July 27.

To insure that your event is included, please forward it, 90 days in advance, to: WEEDS TREES & TURF Events, 7500 Old Oak Boulevard, Cleveland, OH 44130.