



Hort Notes

An educational newsletter with research-based information for businesses and individuals involved in selling, planning, designing, servicing, and enjoying landscapes and gardens.

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UMass Extension's
2002 UMass Garden Calendar Available Now!
American Beauties in the Garden

This year's UMass Garden Calendar focuses on *American Beauties in the Garden*, highlighting a continuing trend in horticulture toward the increased use of plants of North American origin in the garden. Many plants indigenous to other areas of the country are adaptable to a much larger area than where they grow wild.

Most American Beauties blend well with the introduced plants that already grace our gardens and many that are featured in the calendar are readily available from nurseries and garden centers throughout Massachusetts and New England. The spectacular pictures are complemented with important daily gardening tips to keep your gardens growing through the season, such as when to plant peas, how to manage lawn grubs, pest monitoring information, sunrise/ sunset times, and phases of the moon.

New this year are lists of plants recommended for specific growing conditions.

LANDSCAPERS! Distribute the Garden Calendar to your customers as a thank-you for their business and to maintain their awareness of your company. The bulk rate on orders of 25 or more is \$4.25/each (plus shipping). For more information, call the UMass Extension Bookstore at (413) 545-2717. To order single copies, send **\$8.50** (checks payable to UMass) to **UMass Extension Bookstore, Draper Hall, 40 Campus Center Way, Amherst, MA 01003-9244**. Credit cards are NOT accepted.

Electricity and the 10 Foot Rule

The Accredited Standards Committee Z133.1 is the American National Standard for Arboricultural Operations committee and has just completed work on the 2000 revision of this arboricultural safety standard. While many companies are already following most of the new changes, some companies will have to change with the times or be cited by OSHA. This article will review some of the key changes that have taken place in reference to electrical safety.

Z133, OSHA 1910-269 & 1910-333

There has been some confusion and debate in reference to the 10 foot proximity rule and electrical hazards. Z133 sections 3.10, 3.11 and 3.21 clearly state that any utility line has to be considered an electrical conductor and that an electrical hazard exists. This electrical hazard exists whenever a worker, tool, tree or any other conductive object is in proximity (10 feet) to such. Within ten feet, only a qualified line-clearance arborist shall perform the work.

Many tree workers also need to follow the OSHA 1910-269, the so called vertical standard, that applies to utility work. There is some debate as to whether or not the 1910-269 applies to all tree workers. Several Z133 committee members are of the strong opinion that if you are not doing utility electrical operations, then the standard does not apply.

To add to the confusion we also have OSHA 1910-331-333 which is an OSHA-wide standard. It outlines electrical safety related work practices that apply to all workers, except those who come under 1910-269. 1910-333 states that “the standard does not prohibit workers who are not ‘qualified persons’ from working in a tree that is closer than 10 feet to power lines so long as that person or any object that he or she may be using, does not come within 10 feet of a power line. However, it would require a ‘qualified person’ to perform the work if the worker or any object will come within 10 feet of an exposed energized part or branch being cut.”

With all of these requirements, Z133, 1910-269, and 1910-333, whenever a worker will be working within 10 feet of an electrical hazard, that worker has to be a qualified line-clearance arborist. So, while there is some debate as to when the 10 foot rule applies, whenever it does, only a qualified line-clearance arborist can perform the work. It is important to remember that only the employer can designate a person as a qualified line-clearance arborist and when they do this they assume responsibility for that workers qualifications. A “qualified line-clearance arborist” is defined as, “An individual who, through related training and on-the-job experience is familiar with the equipment and hazards in line-clearance and has demonstrated the ability to perform the special techniques involved. This individual may or may not be currently employed by a line-clearance contractor.”

All tree and landscape workers shall be informed and trained to recognize the following situations. It is important to understand that all overhead and underground electrical conductors and all communication wires and cables shall be considered energized with potentially fatal voltages. All arborists and other workers shall be instructed that:

- (1) A direct contact is made when any part of the body touches or contacts an energized electrical conductor.
- (2) An indirect contact is made when any part of the body touches any conductive object in contact with an energized electrical conductor.
- (3) An indirect contact can be made through conductive tools, tree branches, trucks, equipment, or other conductive objects, or as a result of communication wires and cables, fences, or guy wires being accidentally energized.
- (4) Electric shock will occur when a worker, by either direct or indirect contact with an energized electrical conductor, energized tree limb, tool, equipment, or other object, provides a path for the flow of electricity to a grounded object or to the ground itself. Simultaneous contact with two energized conductors phase to phase will also cause electric shock that may result in serious or fatal injury.
- (5) Electrical shock may occur during a ground fault simply by standing near the grounding object with their feet apart (for example, an uninsulated boom comes in contact with conductor with outriggers down).
- (6) An inspection shall be made by a qualified arborist to determine whether an electrical hazard exists before climbing, or otherwise entering, or performing any work in a tree.

In summary, with all of these requirements of Z133, 1910-269, and 1910-333, whenever a worker would be working within 10 feet of an electrical hazard, that worker has to be a qualified line-clearance arborist. On April 4, 2001 the Z133 committee, including the OSHA members present, reviewed the 10 foot proximity rule and when it applies. It was the consensus of the committee that, "The standard does not prohibit workers who are not 'qualified persons' from working in a tree that is closer than 10 feet to power lines so long as that person or any object he or she may be using, does not come within 10 feet of a power line." Keep your eyes open and have a safe and prosperous season.

*H. Dennis P. Ryan III & Brian Kane
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UMass. Dept. of Natural Resources Conservation*

Seminar - Diseases of Herbaceous Perennials
Friday, October 19, 2001 • Radisson Hotel, Cromwell, CT • 8:30 am to 12:30 pm
Registration deadline October 5

Cosponsored by University of Connecticut Cooperative Extension and the Northeast Division of the

American Phytopathological Society. Topics will include *Nematode Diseases*, *Viral Diseases of Herbaceous Perennials*, *Fungicide Management*, *Management of Root Rots in Herbaceous Perennials*, *Control of Powdery and Downy Mildew*, *Insect Pest Management* and *Weed Management*.

Pesticide recertification credit for all New England states has been requested.

The cost is \$50 per person. Send registrations to Leanne Pundt, UConn Cooperative Extension, 1066 Saybrook Rd., Box 70, Haddam, CT 06438. Make checks payable to University of Connecticut. For more information, contact Leanne Pundt at (860) 345-4511 or lpundt@canr.uconn.edu

**Protecting the School Environment:
Adopting Integrated Pest Management
Complying with the Children and Families Protection Act**
A Conference Sponsored by UMass Extension

**Monday, October 22, 2001 Mullins Center, University of Massachusetts - Amherst
9AM - 3:00PM**

This one day educational conference is for those individuals responsible for developing and implementing an integrated pest management (IPM) plan for school grounds. This includes landscapers, grounds managers, school and community officials and employees, and others interested in complying the Massachusetts Children's Protection Act.

The program will focus on understanding and complying with the Children and Families Protection Act. Attendees will learn how to develop an integrated pest management plan in their community, site assessment techniques of outdoor properties, and create site specific plans for school facilities. Managing indoor and outdoor pests and pest management materials will be also be discussed.

Speakers include UMass Extension Educators Mary Owen, Reg Coler and Randall Prostack; Dr. Patricia Vittum of the UMass Department of Entomology; and John Kenney and Jill Warren of the Massachusetts Department of Agriculture. A panel of school grounds managers and pest control operators will talk about their experiences with developing and implementing IPM plans.

To register send \$89, payable to UMass, to School IPM, French Hall, 230 Stockbridge Rd., UMass, Amherst, MA 01003. Lunch is included. For information contact: Mary Owen 508-892-0383, Reg Coler 413-577-3976 or Kathleen Carroll 413-545-0895/fax 413-577-1620. You can also go to <http://www.umassgreeninfo.org/> or <http://www.umass.edu/umext/schoolipm>

Credits: 6 pesticide contact hours in categories 36, 37, 41, 43, 44, 46 and applicator's license. CEU's

have been awarded for the Certified Parks and Recreation Professional. MCH and MCLP credits have been requested.

Disclaimer: Where trade names (*) are used for identification, no product endorsement is implied nor is discrimination intended against similar materials. The authors have assembled the most reliable information available at time of printing. Due to constantly changing laws and regulations, UMass Extension can assume no liability for recommendations.

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