

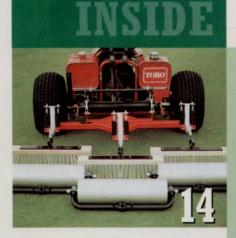
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FEBRUARY 1998 VOLUME 38• NUMBER 2



ON THE COVER: PELICAN HILL GOLF CLUB'S OCEAN COURSE NORTH, #18. THE COURSE IS ONE OF SIX HOST-ING THE GCSAA TOURNAMENT. DONALD HOOS IS DIREC-TOR OF AGRONOMY. PHOTO COURTESY PELICAN HILL.

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A look at some of the new products coming out this year, to make your job easier and more profitable.

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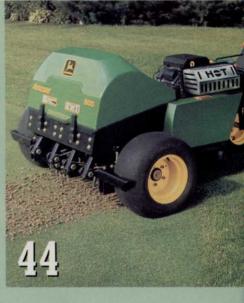
Sponsored by MACH 2 Turf Insecticide, this guide will help the professional turf manager accurately identify the pests damaging turf.

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Most turfgrasses need additional fertilization to achieve maximum growth potential. A look at the products available to turfgrass managers, and how to use them. *JOHN ROBERTS*, *PH.D*.

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sed to be you could hire just about anyone who walked in the door. They wanted to work. Period.

Now, it's all about references, criminal records and drug tests.

References are okay. It's the other two that, in another era, would cause an employer to shake his head and ask, What's happening here?

Rick Osewalt, director of business management for New England Business Service, Inc., Groton, Mass., says hiring just one unqualified employee can nearly destroy productivity, profitability and

Hiring has never been harder. Make it easier.



Deny The Jan

TERRY MCIVER Editor-in-Chief

morale in a growing company. Those early days of the company are sensitive, and you can't be spending your time putting out employee fires when you need to be beating the bushes for customers. It's especially bad to lose good employees to a competitor.

"With each employee departure, you forfeit whatever you invested in training, and an amount of knowledge and information that even experts haven't dared calculate," says Osewalt.

Firing someone isn't as easy either, says Osewalt, thanks to increasing government and legislative involvement in labor and employment issues. So now, you must be prepared to possibly defend your decision in court.

Here's some tips from Osewalt on keeping disputes away from your office door:

• 1. Demonstrate a businesslike approach from a prospective employee's first involvement with your company, says Osewalt. Make the application simple to understand. Make job descriptions clear (and detailed), and avoid using words or expressions that denote a possible gender or age preference (salesman; Girl Friday; young).

2. Maintain complete and up-to-date records on each employee. Keep job performance files, and include notes on work record, changes in responsibilities or salary. Make note of warnings you issue, even if they are verbal warnings.

3. Keep the employees well-informed, especially when it comes to wages, overtime reporting and safety standards. Encourage open lines of communication. You can dodge many potential problems, says Osewalt, if employees feel they can talk openly about problems or concerns.

Employees aren't always looking for instant solutions to their work-related problems, but they do want to be listened to and taken seriously.

New England Business Service, a 45 year-old company, supplies small business products to more than a million customers, to help improve management, marketing and operation success. LM

UNIVERSITY CLIPS

How do metals bind with soil?

Dr. Lynn Katz, a visiting scientist in the **Univer**sity of **Delaware** plant and soil sciences department, focuses on the fate and transport of soil contaminants, with emphasis on metals.

"Soils treated with industrial wastes or sludge result in levels of metals, such as iron, uranium and chromium, which could contaminate groundwater," says Katz.

"By understanding how these metals are transported in the groundwater, we can develop applications to predict the process, thereby preventing the metals from migrating."

One key to this research is learning how metal ions are bound to soil materials.

New weed research at U.Fla.

Dr. Philip Busey, associate professor of environmental horticulture at the **University of Florida**, reports he is working on control of dollar weed in St. Augustinegrass through irrigation management.

"Dollar weed is essentially an aquatic plant," says Busey, and irrigation practices have long been a contributor to its growth. If you've got it, you can moderate it by backing off on the watering." Dr. Busey is also looking at timing of preemergent herbicides for goosegrass and crabgrass control in golf and athletic field turf.

4

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Thanks to John Deere hydraulics, the 4100 delivers effortless power steering, a responsive **3-point hitch**, and fast loading with the available John Deere 410 Loader. Other attachments include mid- and rear-mount mower decks, front blade, power broom, snow thrower and Category 1 3-point-hitch tools.

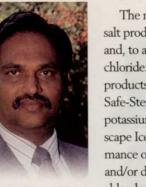
See your John Deere dealer for more details. If you don't know where one is, call us at 1-800-537-8233, or find us on the Web at *www.deere.com*

*Manufacturer's suggested introductory price for gear model (base equipment only). Price may vary by dealer. Setup charges, freight, taxes, and additional dealer charges (if any) are extra.



Gypsum can reduce salt damage to trees, turf

We have a small snow removal operation. We use sodium chloride or calcium chloride-based products for deicing. I understand that gypsum can prevent or lessen the damage that these products cause to trees and turf. How is this possible? What products should we be using? —NEW YORK



BALAKRISHNA RAO

Manager of Research and Technical Development for the Davey Tree Co. Kent, Ohio

SEND YOUR QUESTIONS TO:

"Ask the Expert" Landscape Management 7500 Old Oak Blvd. Cleveland, OH 44130

Please allow two to three months for an answer to appear in the magazine. The most common deicing salt products are sodium chloride and, to a lesser degree, calcium chloride. You may find other products such as urea, rock salt, Safe-Step, magnesium chloride, potassium chloride, and Landscape Ice Melter. Their performance on snow and ice melting, and/or damage to nearby desirable plants varies.

The commonly used sodium chloride is toxic to plants in relatively low concentrations.

Gypsum contains calcium sulfate and is effective in reducing the potential for sodium injury to plants. Gypsum must be applied before injury occurs.

Salt injury can occur either from foliar absorption, or absorption through the roots. If gypsum is present in the rootzone during the time when sodium salt is being applied, the calcium in gypsum prevents sodium from binding to soil particles. Since the sodium is not held in the soil, it can be leached beyond the rootzone with rains, melting snow, or irrigation.

However, if toxic levels of sodium remain in the rootzone, it causes phytotoxicity and tissue hydration. This is called physiological drought. Gypsum may not be helpful in minimizing salt damage to foliage if the salt is sprayed on the plant.

Apply gypsum before putting down sodium salts. This allows the the gypsum to solubilize and release calcium. Surface application of 50 lbs. per 1,000 sq. ft. should be sufficient.

Gypsum won't counteract the salt effect of calcium chloride. Although calcium chloride is not as harmful as sodium salt, too much can harm plants.

Tree roots need protection from construction

We're working with a large developer at a construction site which was previously a wooded area. We want to protect the roots of the remaining trees, as well as to prevent any further soil erosion. Suggestions? —MICHIGAN

There are no simple post-operation remedies!

The trees that you want to save shouild be fertilized well in advance of winter and prior to stresses caused by nearby construction. This will promote root growth. Protect the area within the dripline of the tree with a special fence. Try to keep heavy equipment off of this area.

If that's not possible, consider using some plywood or similar material to prevent compaction. Areas that are already compacted can be aerified, radial trenched and mulch, or vertical mulched. Avoid scuffing or injuring roots and bark.

To protect the exposed or

cut roots from low temperatures, consider covering them with soil and/or mulch. Mulch should not be more than three to four inches deep. Don't pile mulch up on the tree trunk.

Valuable tree root systems may be further protected with some sort of thermal insulating product. Reports indicate variable results and it may not be practical in some situations.

To avoid winter erosion problems, it's important to conduct construction operations with minimum land exposure. The bare ground should be revegetated to a temporary or permanent cover to avoid erosion. In some situations where no immediate development will be done, seeding with turfgrass, ground covers like crown vetch or clover might be beneficial for erosion control in slopes as well as in other areas.

If it's too late for seeding, consider dormant seeding or mulching. If using mulch, make sure to use an additive to provide additional protection. Seeds should be properly covered with mulch such as straw, polymer-based products, or Penn-mulch. Erosion problems may be a major concern if there are mounds of soil or slopes at the construction site. Erosion control blankets and mats provide excellent protection on steep slopes. Some can be purchased with seed and fertilizer within the blanket or mat. LM

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The science of controlling broadleaf weeds in turfgrass just took a giant leap into the future. Introducing Millennium[™]Ultra, Cool Power[™] and Horsepower[™] from Riverdale.

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