PLCAA—Growing Leaders For Success

The Professional Lawn Care Association of America is in the business of "Growing Leaders." Growing your career, your company and your industry, that’s our mission. From all parts of the United States, Canada and around the world, PLCAA members are dedicated lawn and landscape professionals, grounds managers, industry suppliers, and students committed to professionalism and success.

Invest in your success, join PLCAA today! As a member, you can take advantage of:

- Year-Round Business, Legal and Technical Advice
- 1-800 Resource Hotline & Web Site
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- Tools to Promote Your Role as an Environmental Steward
- Discounts on Educational Products, Conferences & Workshops
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- Legislative Support and Updates on the Issues
- Subscriptions to Informative Publications
- Discounts on PLCAA Operating Efficiency Study
- Public Awareness Campaigns to Spread the Good Word About Turf
- Discounts on Green Industry Expo Booth Space for Suppliers
- Exclusive Use of the Symbol of Good Practice Logo

"PLCAA keeps our company sharp, which translates into efficiency. The many benefits we receive roll down to the bottom line. We belong to a nationally and internationally recognized association, and PLCAA is truly the leader in landscaping and maintaining turf." — Michael Kemaghan, Weed Man, Mississauga, Ontario

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This new single-source reference provides the most current and comprehensive information on the basics of turfgrass and landscape management available today!

The Landscape Management Handbook

This new single-source reference provides the most current and comprehensive information on the basics of turfgrass and landscape management available today!

The Landscape Management Handbook edited by William E. Knoop

125 pages, softcover, Item #LSMB830 $34.95

The Landscape Management Handbook provides a unique, single-source reference of comprehensive information on a variety of turf and landscape topics. It’s an ideal handbook for golf course and lawn care superintendents and crew members, and is also appropriate for schools that teach basic turf and landscape management.

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CODE: 950072

Visit PLCAA’s Web Site: www.plcaa.org

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Fungal disease at work on white spruce

My white spruce are dropping needles. On some branches I have noticed a 6 to 10-inch circle of dead needles. Many branches are dead. They seem to die from the outside in. Several people have told me the problem might be needle cast. I have seen this in southern Minnesota. What do you think?

—MINNESOTA

Your problem appears to be either a needle cast disease called rhizosphaera or cytospora canker. Both are diseases caused by fungi, and both usually start from the lower portion of the tree and spread upwards. Infected needles will be purplish. Severe defoliation occurs as the disease progresses.

Cytospora canker develops bluish-white pitching on infected branches. Fungal fruiting bodies appear. Rain, insects and birds spread fungal spores from branch to branch. No fungicide will help manage cytospora canker. Reduce stress on the trees and water, mulch and fertilize properly. Prune infected branches when they are dry. Disinfect pruning tools in rubbing alcohol or dilute bleach to prevent further infection.

Rhizosphaera also causes purplish needle discoloration and defoliation. This disease can be managed with fungicides such as Cleary’s 3336. Early detection is important. Unlike cytospora, this disease produces no bluish white pitching on branches, but it produces small fruiting bodies on needles which are visible.

It’s possible that a given tree could have both cytospora and rhizosphaera needle cast diseases. It might be wise for you to send samples of the suspected diseases to a diagnostic lab in your area before treating. Meanwhile, continue to provide proper watering, mulching and fertilizing.

Dealing with warm-season disease

How can I control disease and fungi in south Florida, when the climate is adverse (such as mid-summer), and how will this affect the turf?

—FLORIDA

Success in disease management depends on several factors: correct identification, proper timing for treatment and proper materials. Of course, you cannot select the proper material until you have correctly identified the disease. Your local cooperative extension service or private companies and consultants should be able to help you with that.

If the turfgrass areas have had a history of certain serious diseases, treating those areas on a preventive basis may be beneficial. Most disease can be managed if the problem is detected early in disease development and properly treated. If the disease has progressed too far and is too late to manage, fungicide treatments may not be practical or beneficial. Overseeding or renovation may be necessary.

Along with fungicide treatments, it is important that you identify contributing stress factors and correct them.

This is particularly true with diseases like dollar spot, pythium blight, melting out, brown patch, summer patch, necrotic ring spot, and fusarium blight to name a few.

As far as your question of how will this affect the turf, it depends upon how well the overall disease management has been implemented. Fungicides should be used at the proper time, which in turn depends upon the specific disease activity. The disease-causing agents often establish on stressed and weakened plants.

Therefore, along with fungicide treatments, it is important to identify the contributing stress factor(s) and correct them. Provide good cultural management to improve plant health. Provide a good fertility program with proper amounts of potassium to improve stress/disease tolerance. For most diseases, multiple applications of fungicides are necessary at specific intervals. LM
**The Tougher Turf**

**FALCON II GETS TOP RATINGS IN NTEP TURF TRIALS**

When compared with 91 other varieties of turf-type tall fescue, as part of the most recent National Turfgrass Evaluation Program (NTEP), Falcon II received top ratings for its Turf Quality and Brown Patch Resistance. That's no surprise to us. Our genetic breeding programs were designed to give our new, improved Falcon II all of the characteristics desired by today's top grounds maintenance professionals.

**FULL SUN OR PARTIAL SHADE ARE NO PROBLEM FOR FALCON II**

We have "engineered" a number of desirable qualities into Falcon II. Not the least of which is its ability to thrive in full sun or partial shade. Falcon II germinates rapidly, provides quick fill, has tremendous brown patch resistance and provides a beautiful, deep green color that will make your lawn the envy of the neighborhood.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Progress Report</th>
<th>LSD value</th>
<th>Turf Quality Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falcon II</td>
<td>6.1 MB-21-92</td>
<td>0.2</td>
<td>Higher is better</td>
</tr>
<tr>
<td>Tomahawk</td>
<td>5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titan 2</td>
<td>5.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rebel 3D</td>
<td>5.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shenandoah</td>
<td>5.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finelawn 88</td>
<td>5.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthem</td>
<td>4.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Turf Quality Ratings
(Higher is better) LSD value=0.2
Call for full test results

**TOUGH TURF FOR TOUGH DUTY**

Whether you are planting a small area for a home, or a vast area for a park or athletic field; Falcon II will quickly germinate and fill in, providing a beautiful, deep green colored lawn, with the durability and texture everyone can enjoy for years to come. Falcon II - it's the turf for YOU!
At Echo, we've been giving landscaping professionals exactly what they need for over twenty-five years: superior outdoor power equipment that more than performs... day after day after bumping, jostling, banging, hard-working day.

The result? Power equipment that exceeds professional demands for quality, durability and dependability. Echo Pro Performance. Built by the team that knows what professionals need. Maybe that's why more landscaping professionals choose Echo than any other brand of outdoor power equipment. For more information on Echo Pro Performance products call 1-800-432-ECHO (3246).
Trimmers that deliver maximum performance and maximum versatility. That's Echo Pro Performance. Like our innovative SB Series Trimmers, featuring an ingenious split-boom, which allows the trimmers to be easily converted into a versatile, lightweight edger. And of course, they are powered by our legendary, world-class, two-stroke engine. Just what you’d expect from the number one name in outdoor power equipment.
Saying ‘whoa’ to plastic spikes

By RON HALL/ Managing Editor

ROLESVILLE, N.C.— Turfgrass breeder Dr. Joe Duich called for more study of alternative spikes on golf greens in light of the growing variety of alternative spikes. And the availability of new varieties of bentgrasses.

Duich said that some of these new creeping bentgrasses seem to resist spiking on greens—one of the biggest reasons for going “spikeless”.

The turfgrass breeder spoke at the Turf-Seed, Inc., Field Day in Rolesville, NC, on June 26 concerning “the third generation of bentgrasses”. Duich is a consultant with Tee-2-Green and was instrumental in developing, through the Penn State University breeding program, new varieties like Penn A-1, Penn A-4, Penn A-6, Penn G-1, Penn G-2 and Penn G-6.

Duich said the new varieties offer better heat tolerance, and are finer textured and denser than previous bentgrasses. Duich recommended that the new varieties be mowed closer than say, Penncross. For instance, the Number 2 Donald Ross Course at Pinehurst is mowing its new bentgrass greens at 105/1000ths, and a course with A-4 greens in Virginia Beach is down to 110/1000ths, said Duich.

But it’s the fact that they have a “very upright” growth habit that seems to cause them to resist spiking.

“The superintendents that are using them are stating that they’re not seeing very much spiking on their greens,” said Duich.

Tom Prewitt, manager of Cypress Lakes Golf Club, Hope Mills, NC, and Dr. Joe Duich, right, say new bentgrasses seem to resist “spiking”.

“Spike marks are nonexistent,” added Prewitt. “We can’t force people to go spikeless. I don’t know that spikeless is the answer anyway, especially on a public golf course. We’re just not seeing spike marks” He said Cypress Lakes is a public course near Fayetteville, NC, and will probably get about 38,000 rounds this year.

Meanwhile, the Golf Course Superintendents Association of America (GCSAA) just released its survey of members concerning alternative spikes. The survey was conducted at the 1997 GCSAA in Las Vegas.

About 94 percent of the superintendents supported the use of alternative spikes, and indicated that within two years nearly half of all courses will ban metal spikes.

The movement is already underway at private courses where 45 percent of respondents claimed to have an alternative spikes policy. Only 13 percent of other respondents (from daily fee, municipal and resort facilities) reported requiring alternative spikes. Municipal and public courses are moving more cautiously, partly because of liability concerns.

While the spiking of greens is the primary impetus behind the move away from metal spikes, there are other issues. For instance, turf equipment mechanics say that lost metal spikes often end up on greens and damage their costly and finely calibrated mowers.

TG-CL gets Orkin LC

Downers Grove, Ill.—TruGreen-ChemLawn purchased Orkin’s Plantscaping and Lawn Care divisions on July 24. TruGreen-ChemLawn is a subsidiary of ServiceMaster.

“We are excited about this acquisition, which represents a meaningful expansion of our largest and most profitable business unit,” said ServiceMaster President and CEO Carlos Cantu. “It increases our market penetration in lawn care and plantscaping through the addition of 65,000 new customers. The acquisition...significantly enhances our competitive position in that business by nearly doubling our size.”

Tru-Green-ChemLawn is the leading lawn and landscape service company in the U.S., with more than 3 million customers and 324 service centers.
Turf students study issues; degree program starts

Racine, Wisc. — More than 30 turf students from colleges and universities across the U.S. and Canada spent five days at the Jacobsen Future Turf Managers Seminar in May.

The three-day event included presentation and panel discussions dealing with current and future issues of importance to golf course superintendents. A tour of Meadowbrook Country Club with superintendent Ric Lange, CGCS and Racine Country Club, managed by Mike Handrich, CGCS was included. Students also toured the Jacobsen facility.

Speakers included Joe Hahn, CGCS, Country Club of Rochester, NY, Chip Toma, NFL Fields Supervisor, and Bob Vavrek, USGA agronomist.

"The seminar is right on target," says David Clanton, a senior at Clemson University. "It gives you a view of what the real world is all about."

Jason Blacka, a student from Australia who competed at state and national levels to be named Australian Turf Graduate of the Year, says, "We're in a very special profession. Learning to interact with a variety of people is important."

Jacobsen Textron has also begun sponsorship of the turf industry's first two-year Associate Degree Program for turf equipment technicians. The program will be offered at Texas State Technical College in Waco. The program includes a curriculum focused on a solid understanding of hydraulics, electrical and engine principles and practical, hands-on learning.

The company chose Texas State for its strong mechanics' program and active advisory committee for golf and turfgrass studies, according to Tony Saiia, Jacobsen vice president of customer service and product support.

"The school has excellent training labs," says Saiia, "as well as several holes of golf which provide perfect 'real life' areas for learning about turf equipment."
**HOT TOPICS**

**CLCA seeks sanity in leaf blower issue**

**LOS ANGELES**—The law banning gasoline-powered leaf blowers became effective July 1 in the City of Los Angeles. Although violators could be subject to a $1,000 fine and six months in jail, strict enforcement isn’t expected. In fact, city council likely will grant a one year grace period. This, says the council, will give the green industry time enough to reduce noise and pollution problems associated with leaf blower use.

"It appears that a committee within the substructure of the Los Angeles City Council is recommending and pushing very diligently for immediate delay on the current ordinance (against leaf blowers)," says Robin Pendergrast of International Marketing Exchange, representing the Echo company.

Pendergrast says the police dispatch 911 center has been "inundated" with a variety of callers requesting interpretation of the ordinance and police responses.

Meanwhile, the California Landscape Contractors Association (CLCA) says the green industry can partner with cities and municipalities to reduce and, in many cases, eliminate complaints arising from the use of gas-powered leaf blowers.

Here are some of CLCA’s recommended solutions:

- Running blowers at half speed to reduce noise and maintain maximum control.
- Do not use in residential areas during unreasonable hours.
- The muffler, air intakes and air filters should be routinely checked and maintained.
- Implement "buy-back" programs to phase out noisier, less efficient and older technology equipment. Newer low dB models produce fewer emissions.
- Work with leaf blower manufacturers to inform consumers of decibel levels prior to the purchase.
- Passing city ordinances that require proper use of leaf blowers.
- Passing city ordinances that prohibit outmoded or exceptionally noisy equipment equipment—within reasonable standards.

"The use of electric-powered leaf blowers is not an acceptable substitute. Landscape professionals estimate a 50 percent reduction in efficiency and increased hazards of using electric blowers near pools, spas, ponds or irrigation systems."

CLCA maintains that gas-powered leaf blowers save both labor and money over other methods of debris removal such as using a broom or hosing with water which, of course, is unreasonable in drought-prone California. CLCA members estimate their costs (and therefore their charges) would increase from 20 to 40 percent if they must perform the same functions without the leaf blower.

To receive a copy of CLCA's Position on Leaf Blowers document, contact CLCA at 916/448-2522.

**New drainage keeps Duke up-to-date**

**Durham, N.C.**—Duke University has installed a $200,000 drainage system at Wallace Wade Stadium Field, replacing a nearly 70 year-old grid.

The field meets United States Golf Association standards for drainage, and has put an end to years of sloppy, muddy footing. Project consultant Ross Fowler, who has guided football field construction for The University of North Carolina and has monitored other athletic field projects, says the pipe used has a slick inner surface, "so it allows for faster drainage; it gets the water off the field quicker."

Pipe was supplied by the Mebane plant of Hancor, Inc., Findlay, Ohio.

The project will be the first time the 68-year-old field tile drainage system has been replaced.

"As we removed 16 inches of soil, we found several playing surfaces over a clay loam base, and the tile below had a lot of breaks and clogs," says Darrin Waters, grounds supervisor for the Duke athletic fields.

Fowler designed a grid of four-inch diameter perforated pipe spaced at 20 foot intervals over the entire playing surface. Pipe slopes downward, and feeds into six-inch perforated pipe along the sidelines. A laser-controlled trencher ensured an even ½ percent fall.

The native soil was replaced with a gravel bed and a sand and peat mix.

"This field will drain almost a foot of water an hour," says Fowler.

"Everything on the Duke field drainage project was local," says contractor Nolan Thomas. That includes the pipe, rocks, sand and crew.
<table>
<thead>
<tr>
<th>Variety / Blend</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alliance Brand</strong></td>
<td>Traffic, heat and drought tolerant / A blend of top quality Turf-Seed perennial ryegrasses</td>
</tr>
<tr>
<td><strong>BrightStar II (2M3)</strong></td>
<td>A top variety in the 1995 NTEP trials. A unique leafy, decumbent, late maturing cultivar</td>
</tr>
<tr>
<td><strong>BrightStar</strong></td>
<td>Tops 1994 NTEP ryegrass trials / Extremely dark color / Dwarf growth habit</td>
</tr>
<tr>
<td><strong>Catalina</strong></td>
<td>Low growth profile and reduced clippings / 78% endophyte / Tested as GH-94</td>
</tr>
<tr>
<td><strong>Chaparral</strong></td>
<td>Very dense, low-growing, dark green turf. Lowest vertical growth in turf. Tested as 2DLM</td>
</tr>
<tr>
<td><strong>Charger</strong></td>
<td>Good low fertility and cool weather performance / Improved disease resistance</td>
</tr>
<tr>
<td><strong>Charger II</strong></td>
<td>Dark, dense, dwarf turf ranks high in winter overseeding trials. Experimental code 2QM.</td>
</tr>
<tr>
<td><strong>Citation III</strong></td>
<td>Excellent heat and wear tolerance / Improved disease resistance / Rich, dark green color</td>
</tr>
<tr>
<td><strong>Manhattan 3</strong></td>
<td>Very dense growth habit / Rich color / Good mowing qualities / Contains endophyte</td>
</tr>
<tr>
<td><strong>Navajo</strong></td>
<td>Dark green, disease resistant turf / Excellent for overseeding / Good shade tolerance</td>
</tr>
<tr>
<td><strong>Quickstart</strong></td>
<td>Heat tolerant / Establishes quickly / Disease resistant / Excellent for overseeding</td>
</tr>
<tr>
<td><strong>Roadrunner (2ET)</strong></td>
<td>Dark blue-green color ideal for winter overseeding and permanent turf / Contains endophyte</td>
</tr>
<tr>
<td><strong>Sunrye (246)</strong></td>
<td>Dark green color / Dwarf growth habit / Contains endophyte / Disease resistant</td>
</tr>
</tbody>
</table>

Turf-Seed, Inc. uses the full recommended rate of Apron® XL™ LS seed treatment. Help your grass seed get a good, healthy start.
Perennial ryegrasses from Turf-Seed, Inc. represent the latest in research and development technology and express a sound investment in turfgrass agronomics. Our varieties and blends typically produce:

- Rich, dark green color with enhanced disease resistance
- Quick-to-establish, dense tillered turf with improved mowing qualities
- Excellent turfgrass ratings in NTEP Trials, plus California, Arizona, and North Carolina overseeding trials
- Most contain high levels of endophyte for natural above-ground feeding insect resistance

Establishment
Turf-Seed perennial ryegrasses establish quickly in bare soil and will germinate in six days with favorable conditions. Dark color and a height of 2 to 3" can be expected in two weeks, with the first mowing at about 21 days. Limited use can be expected in 30 days. Our advanced varieties can be mowed at 1/4" and less for Winter overseeding greens and tees in the South.

Our perennial ryegrasses perform exceptionally well as a monostand, and when mixed 1/3, 1/3, 1/3 with Turf-Seed's Kentucky bluegrass and fine fescues for year-round home lawns, parks, and other shady areas subject to wear and cold. Seed this mixture at 5 lbs. per 1,000 sq. ft., or 400 lbs. per acre. Keep seeds moist until seedlings emerge in 21 days.

SEEDING RATES FOR PERMANENT TURF

<table>
<thead>
<tr>
<th>Turf Type</th>
<th>Rate Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletic fields, playgrounds</td>
<td>8-10 lbs./1000 sq. ft.</td>
</tr>
<tr>
<td>Golf course fairways, roughs, and cart paths</td>
<td>8-10 lbs./1000 sq. ft.</td>
</tr>
<tr>
<td>Parks, trailer courts, and cart areas</td>
<td>8-10 lbs./1000 sq. ft.</td>
</tr>
<tr>
<td>Low maintenance areas</td>
<td>3-5 lbs./1000 sq. ft.</td>
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</tbody>
</table>

WINTER OVERSEEDING RATES

<table>
<thead>
<tr>
<th>Turf Type</th>
<th>Rate Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greens</td>
<td>30-40 lbs./1000 sq. ft.</td>
</tr>
<tr>
<td>Tees</td>
<td>20-30 lbs./1000 sq. ft.</td>
</tr>
<tr>
<td>Fairways</td>
<td>.500-700 lbs./acre</td>
</tr>
<tr>
<td>Roughs</td>
<td>.450-600 lbs./acre</td>
</tr>
<tr>
<td>Athletic fields, playgrounds</td>
<td>10-15 lbs./1000 sq. ft.</td>
</tr>
<tr>
<td>Home lawns, parks, civic areas</td>
<td>8-10 lbs./1000 sq. ft.</td>
</tr>
</tbody>
</table>

Fertilization rate
Due to the naturally dark-green color of Turf-Seed ryegrass varieties and blends, they should require less fertilizer than is customary. Three to 6 lbs. of nitrogen per 1000 sq. ft. per season should be adequate.

Blue Tag Certified Program
Turf-Seed ryegrass blue tags earn cash for turfgrass research. Hundreds of thousands of dollars have been contributed to university research and scholarship programs as well as turfgrass councils in the purchaser’s name. Call Turf-Seed, Inc., or ask your seed dealer for details.