

Week 1



Week 2



Week 3



Week 7



Week 8



Week 9

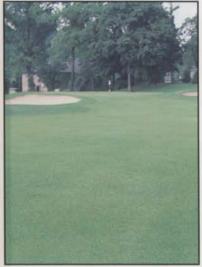
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A special free offer to try an even better approach.

Because Super Weather Stik Daconil Ultrex fungicide is so effective at these new low rates, we've been able to



Week 4



Week 5



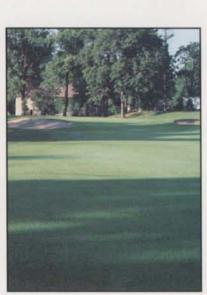
Week 6



Week 10



Week 11



Week 12

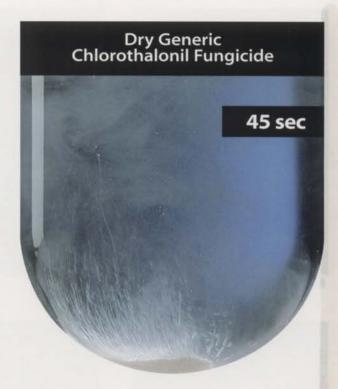
Itrex Every Time You Spray After Week After Week.

develop a whole new spraying program using it at regular seven day intervals. As the photos above show, this program has been getting great results at courses like Shaker Heights Country Club, near Cleveland, Ohio, and it can do the same for you, giving you better disease resistance management and a healthier, greener course than you've ever had before, while still supporting

your cost containment efforts. And to prove that to you, we've created the Daconil Ultrex Challenge — with enough free product for you to test this program on one green or fairway all season long. Ask your distributor for all the details. It could change your whole approach to disease control.







With its breakthrough Stable Suspension Technology™, Daconil Ultrex fungicide goes into suspension in less than a minute and stays in suspension even after six hours.

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that it eliminates all need for rinsing to make disposal easier, too. Plus the superior sticking and staying power of our Super Weather Stik formulation for exceptional broad-spectrum control of some 70 diseases that attack turf, ornamentals, and trees. And the fact that there's never been a documented case

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he United States Golf Association
Green Section's Specifications for a
Method of Putting Green Construction
was introduced in 1960, and through
several revisions has remained the
most widely-researched and successful method in
the world.

When built and maintained properly, USGA greens have provided excellent results over many years for golf courses in most regions of the United States and the world. Nevertheless, through the years, a number of problems and questions have arisen, and since 1990, the USGA has taken several important steps to address these concerns.

▶ The specifications received a thorough review and updating by a committee of prominent scientists, and the latest revision was published in 1993.

➤ Standardized laboratory procedures were developed by a committee of scientist and laboratory practitioners, and in 1995, the procedures were approved by the

American Society of Testing and Materials, the largest standards organization in the U.S.

▶ A laboratory accreditation program was established by the Green Section in 1996, through the American Association for Laboratory Accreditation (ASLA), to help ensure the best possible results for golf courses that test materials for green construction. Three laboratories have become accredited thus far, and several more are completing necessary steps.

▶ In 1996, the USGA's Turfgrass and Environmental Research Committee initiated research projects at 12 universities to increase our scientific understanding of green construction methods and materials. Some of these studies will cover a period of five to 10 years. More than \$850,000 has been allocated, and additional studies will be funded as other questions arise.

▶ The USGA established a Construction Education Program in 1996 to help educate and proPAGE 4 G
Bermuda breakthrough for greens

PAGE 8 G
Pelican Hill, nature's partner

PAGE 12G

An easy way to track equipment

PAGE 16G >
Seattle course faces big cleanup

PAGE 19G
Good tees need feeding, aerating

vide the latest information to golf course architects, builders, developers, superintendents and others about green construction and other golf course construction and renovation topics.

The Green Section is working with the Golf Course Superintendents Association of America (GCSAA) and the National Turfgrass Evaluation Program (NTEP) to test new bentgrass and bermudagrass varieties on golf course practice greens built to USGA recommendations. Construction will be financed in part by the USGA, and it is hoped that construction can begin during the spring and summer of 1997. We are in the process of identifying fifteen courses located in various climatic zones throughout the country that will participate in these variety trials, which are expected to last for five years. Green construction is one of the most visible aspects of golf course management, to superintendents and course officials alike. Greens are one of the most costly features on a golf course to build and maintain, and the USGA is committed to providing the best possible information on green construction and management to everyone involved. LM

> Guest columnist James T. Snow is national director of the USGA Green Section, Far Hills, N.J.

Better greens a worthy USGA goal



James J. Show

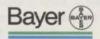
JAMES T. SNOW Guest columnist

Ceep these guys off your course.

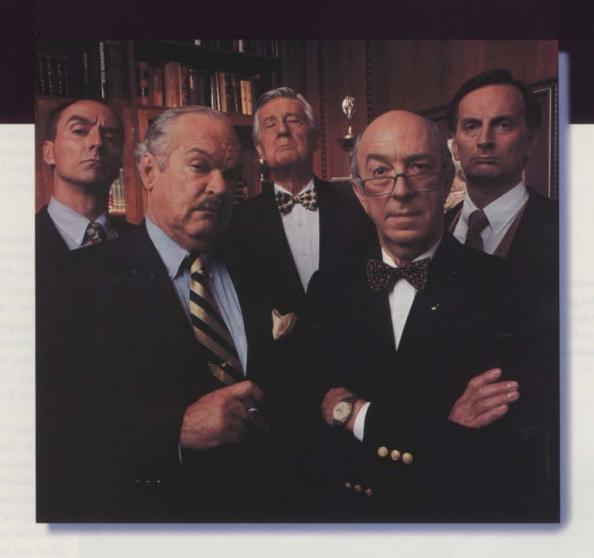


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Bermuda breakthrough!

Morris Brown found Champion 'growing where it shouldn't be.' Test results show it to be a valid candidate for use on southern putting greens.

by BILL KNOOP, PH.D / Technical Editor

The Champion bermuda

has fooled golfers who

thought they were

beyond 10.

putting on bentgrass.

Stimpmeter reading goes

nce in a while something comes along in our business that's so far ahead of what we have had that it's hard to believe.

It may be a new management technique, a new piece of equipment or even a chemical that does a much better job of controlling a pest without hurting the environment.

The latest big breakthrough is bermudagrass. Those of you who have been around this business a few years may know the names of some turfgrasses that set new standards for the respective variety. Some examples from the past are Merion Kentucky bluegrass, Manhattan perennial ryegrass and Penncross creeping bentgrass. These three represent significant improvements over the others of the same variety that we were using.

For years there has been a certain amount of

pressure on golf courses in the south to provide bentgrass putting greens. Since all the bentgrasses are cool-season turfgrasses, growing them successfully in the south has been a challenge that is second to none. Bentgrass greens have been perceived by many golfers to have a better quality putting surface than bermuda, but some suggest that the movement in the south to bentgrass putting greens may be more of a fad. In other words, if "Club A" has bentgrass greens, then "Club B" must also have bentgrass greens. For whatever reason, many southern golf courses have bentgrass greens, and there aren't too many people that won't admit that a good bentgrass green probably may putt better than green planted with either Tifdwarf or Tifgreen.

Closely resembles bentgrass

Champion is the new dwarf bermudagrass that can form a putting surface denser than most of the bentgrasses. Those who have putted on a Champion green concede that they wouldn't have known it was a bermuda green if they hadn't been told.

The most interesting fact about Champion is that it was not a product of some very large university or company breeding program. Like some of our other turfgrass varieties, Champion was simply "found,"

by Morris Brown in 1987.

Brown, of Coastal Turf Inc., Bay City, Texas, noticed a very small, different looking, bermudagrass growing in a Tifdwarf green that was established way back in the 1960s. Morris has spent a significant part of what spare time he has had looking for grasses growing where they shouldn't be, or for grasses that just look or act differently than they should. Champion was one





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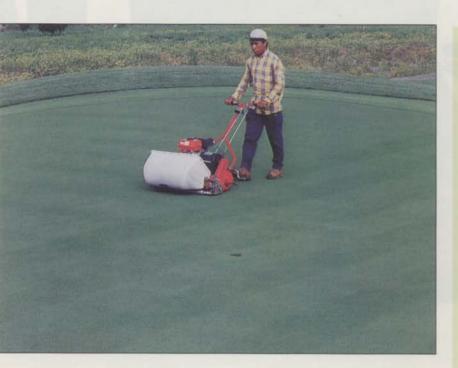
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Champion bermudagrass is reported to have good tolerance to close mowing, at heights below ½2.

of these and it seems to be a naturally-occurring mutant of Tifdwarf.

Morris knew that just because this new bermudagrass looked very promising as a putting green grass, there were many tests that needed to be run to make sure it was as good as he thought. He turned this new bermuda over to Dr. Jim Beard of the International Sports Turf Institute. Beard had previously led the turfgrass research program at Michigan State and Texas A&M universities.

Gene print taken

The first step in analyzing Champion's potential was to take it's genetic "fingerprint." This revealed that while Champion is distinctly different than Tifdwarf, Tifgreen or Tifway, it does share some genetic identity with Tifdwarf. Since its closest relative is Tifdwarf—and Tifdwarf is the choice for many bermuda putting greens, Beard conducted a series of comparison tests between Champion and Tifdwarf.

Most rounds of golf are played during the summer months. In the south, when play is at its peak, bentgrass greens can be under their greatest stress. This has caused some serious problems. Summer care of bentgrass, according to many superintendents, has been significantly higher in both materials and labor costs.

We now can plant a bermuda that will produce

Better density, no seed heads

All the tests that Dr. Beard conducted were replicated and analyzed statistically. The results were very interesting:

- Champion had nearly twice the shoot density of Tifdwarf, when mowed at % inch.
- 2. Champion produced more than twice as many stolons as Tifdwarf at ¼ inch. This may help to explain Champion's higher density.
- 3. While Champion has a high lateral growth rate, it has less than half the vertical leaf growth rate as Tifdwarf. This should mean that the putting quality of a green should remain high longer and after mowing.
- Champion's leaf blade is about 14 percent finer than Tifdwarf.
- No seed heads have ever been observed on Champion.
- 6. In a wear test using a machine that traveled over the green 1900 times, Champion had about a third of the wear damage as Tifdwarf, cut at ¼ inch.
- 7. Champion recovered 3.4 times faster from wear as Tifdwarf.
- Champion proved to be able to withstand lower temperatures and have better recovery from the cold than Tifdwarf.

B.K.

the putting quality we've always associated with bentgrass. And the hotter it gets, the better the green.

We will be on the verge of a whole new trend in the south: back to bermuda! \square

For more information on Champion, contact Morris or Mike Brown, at (800) 463-8873; (409) 245-3231.

ir Course.



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Don Hoos explains how these coastal California courses were designed and built with the wildlife in mind.

They're irrigated with reclaimed water, and much of the acreage wasn't touched.

by Steve and Suz Trusty

nvironmental issues will continue to play a bigger and bigger role in what golf course superintendents do and how we approach things," says Don Hoos, director of agronomy for Pelican Hill Golf Club near Newport Coast, Calif.

"The 400 acres of Pelican Hill were part of a huge area of ranch land which The Irvine Company owns and has developed in stages. It took them seven or eight years to work through the planning and approval processes to get the okay to begin construction. Environmental issues have been a top priority from the planning stages through course construction and in our maintenance practices."

Pelican Hill is an environmentally sensitive area. A popular surfing beach is on the stretch of Pacific Ocean adjacent to the complex. Crystal Cove State Park is nearby.

Two challenging, beautiful and decidedly differ-

ent golf courses lie within Pelican Hill—the traditional tree-lined Ocean Course and the Links Course, more reflective of the native California landscape.

Hoos notes that only 200 of the 400 acres of Pelican Hill are in turf. And, while provisions of the original agreement called for 13.7 acres of California coastal scrub as habitat for the gnat catcher, an endangered bird species, the native plant material was integrated into 40 acres of the Links Course design. Also, many natural areas were left undisturbed during construction.

State-of-the-art irrigation

Both courses irrigate with reclaimed water from the local Irvine Ranch Water District. Each course has a separate Rain Bird Maxi computer-controlled irrigation system, and its own weather station to supply the evapotranspiration data on which irrigation is based. Turf and native areas are irrigated separately. Because the native soil is heavy clay, water is applied in small amounts at a time, with the cycle repeated as necessary for optimum moisture levels.

Hoos says, "The Irvine Company set up a monitoring program for storm water runoff which measures for pesticides, nitrates, and any other kind of pollution that could possibly run off from a golf course. The program is entering its fifth year and, to date, there's been no measurable discharge from the courses."

One step ahead of regs

Pelican Hill complies with, and strives to stay a bit ahead of, the stringent California pesticide programs and regulations. "The state agencies have done a very good job overall of implementing these regulatory programs. They took the educational approach, setting up the parameters, taking steps to insure that those affected understood the programs and regulations, and giving us adequate time to comply. I think it's been a much more effective way to bring people into compliance and get them focused on environmentally compatible practices than just establishing the regulations followed immediately with non-compliance checks and fines."

A watchful eye

Hoos points out that many issues of community concern revolve around initial development and construction of golf courses. Each community wants to insure the course will not adversely affect the environment, or the residents' quality of life.

Once the course is completed, members of the community immediately surrounding it keep a watchful eye on changes in course design, removal or replacement of trees, shrubs and other landscaping features, irrigation patterns and applications of fertilizers, fungicides and other pest control products. Though golfers' concerns center more on the playability of the course, environmental factors are an issue.

"When people see spray tanks out on the course and operators in protective clothing, they wonder if they should be protected too, and if what's taking place is dangerous. Open communication outreach programs can help address these concerns."

Looking to the future, Hoos says, "I think the turfgrass breeding based on genetics is going to be exciting as more information becomes available about DNA and the location of the different genes that control different parts of the plant. I'm sure the major emphasis will be on food and fiber. But I hope this industry will also benefit and we can see some improvements in



Hoos: open communications with the public, improved interview process and a more thorough background check procedure for perspective employees have lowered turnover.

turfgrasses for disease resistance, insect resistance, cold hardiness and more. That will make our jobs easier and we'll have less reliance on pesticides."

Thoughtful hiring

On-course environmental programs need the full support of crew members. Yet, the future is sure to hold the same employee challenges which are now a constant on golf courses across the United States. Pelican Hill has a current employee turnover rate of from five to 10 percent. Hoos notes that an upgraded interview process and a more thorough background check procedure for perspective employees has helped bring them to that rate.

"We also participate in a pilot program with the INS (Immigration and Naturalization Service) to verify the validity of applicants' green cards, to make sure they are authorized to work in the U.S. We make people aware of that when they come in to interview for the hiring process. It does discourage illegal aliens from applying for jobs. This saves us time upfront and problems later on.

"By concentrating on hiring good people, we've also been able to step up our training programs because crew members are more receptive and respond better to the training. Greater competence levels in our personnel has helped us to adhere to maintenance procedures and policies and to reduce our overall maintenance costs."

Hoos commends efforts to promote the professional image of the superintendent. He gives much credit to the Golf Course Superintendents Association of America (GCSAA).

This past November Pelican Hill was the site of the 10th annual John Deere Team Championship Golf Tournament. The event brings together teams comprised of a course superintendent, pro, club manager and club president. A John Deere representative joins the team for the finals.

Adds Hoos, "Superintendents today are more focused on the big picture of how our courses are perceived by golfers, the community and the public. We'll need to incorporate all the education, training, resources and technology available to keep our courses and our role as superintendents in a positive position on environmental issues in the future."

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Circle No. 133 on Reader Inquiry Card

This "Big Board" tracks equipment



A veteran golf course mechanic says you don't have to be too fancy to track the condition and costs of your maintenance equipment.

> olf course superintendent Steve Geller and mechanic Joe Pope developed an easy and efficient way to track the condition of the equipment at Cedar Point Club, Suffolk, Va.

"It's real simple," explains Geller. "We have a white board that's 6 feet by 4 feet, and we can write on it with eraseable markers. We bought some ribbon-type marking tape and

made enough columns on the board to list our 66 pieces of equipment."

Each piece of equipment is given a number on the board. For instance, in the number one column is a greens mower. Number 19 is a Ford tractor, and so forth. The numbers themselves, and the order they're displayed, is not particularly significant. What is important is the data following each listing. Superintendent Steve Geller, left, and mechanic Joe Pope in Suffolk, Va., developed this big board to track maintenance on all the mechanical equipment used at the Cedar Point Club. They say employees like it.

The second, one-inch wide column behind each equipment listing, for instance, contains green or red notations, green indicating that that particular piece of equipment is operable, red meaning that it's being repaired or serviced.

Subsequent columns on the big board show, at a glance, the number of hours of operation on each piece of equipment, when its next PM (preventive maintenance) is due—either in hours or by calendar date—and when the last PM was done.

"It was an inexpensive system to put together," says Pope, formerly an airplane mechanic in the U.S. Navy. "I think you can buy about everything you need at an office supply store."

Pope says workers at the golf club seem to appreciate being able to easily tell the status of the equipment at the course.

"The board is right behind my desk and next to the key locker where we keep the equipment keys," says Pope "Whoever Steve (Geller) assigns to the equipment can just glance up and see right away whether the equipment is up or down, or whether it's getting close to a PM (preventive maintenance). It's worked real well for us."

Beyond the big board, Pope says that he's developed, and uses, a form that details the on-going maintenance and repair history for each piece of equipment.

"At the end of the year I total each piece of equipment up and I give Steve a report on what each piece of equipment costs to maintain for the year, including parts," explains Pope. □



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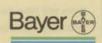
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Course mops up after winter floods

Superintendent Rick McDow estimates a 350hour clean up and repair job needed to get Ballinger back in shape.

by LESLEE JAQUETTE

f the Ballinger Park Municipal Golf Course were a bathtub, it would have the world's biggest ring, from flood waters that covered the course in December.

Included among the flotsam and jetsam floating along what

used to be fairways are pop cans, a soccer ball, railroad ties, cedar logs, four rowing skiffs that were lifted from a shoreline, and a 30-foot boat dock.

The damage done to this nine-hole public golf course located 13 miles north of Seattle on Lake Ballinger, is extensive.

Superintendent Rick

McDow estimates more than two-thirds of the 35-acre course was covered for several days in late December/early January, in what looks like a tidal slosh.

McDow and assistant superintendent Andrew Watters estimate the flood had left twice as much damage than any they have seen in 12 years. Beyond dozens of logs, railroad ties, docks and assorted junk, the flood took out five of six bridges on the course.

Situated in park lands adjacent to the lake, the course sits at an elevation of 280 feet. With two recent snowstorms and record-breaking rainfall, the lake rose more than six feet to reach within a few feet of the pro shop.

During the rainy months, guests often play while wearing rubber boots, and only the two holes closest to the lake become saturated. This year, every hole on the course had some standing water around it.

Monumental clean up

The damage is great and the clean up is going to take weeks. A lower budget doesn't help either.

For starters, McDow estimates the clean up will take a minimum of 300 man hours with an additional 50 spent to replace the five lost bridges. But is there more rain to come? McDow thinks so.

More than 100 cedars and fir trees will have to be removed from Ballinger Park.

Seattle's rainfall passed the 52-inch mark in 1996, which is 15 inches above average for a year, and McDow sees no reason to believe the monsoons will abate just as winter begins.

The prognosis for the repair time—as of mid-January—was that the course would have to remain closed till March.

McDow recalls that during the course's best year-1987, a drought year-61,000 rounds were played. In comparison, wet 1996 saw only 35,000 rounds. Given the way 1997 has roared in, McDow anticipates an all-time low for rounds played.

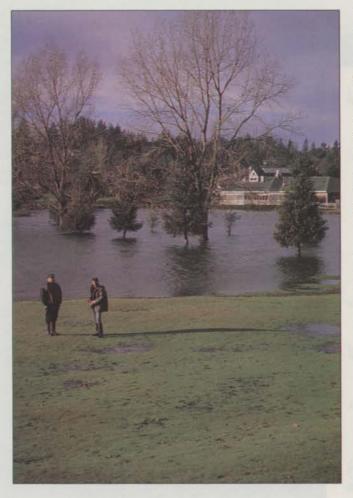
Lost revenue, lost trees

Beyond increased labor needs and lost revenue, at least 100 cedar and fir trees will probably die and have to be removed as a result of the flood.

McDow explains that while the cedars can withstand "wet feet" every now and then, they can't endure it for days at a time, and the firs can't tolerate flooding at all. Some of these trees are 15 years old and worth thousands.

Shaking his head as if he's losing good friends, McDow says the cost is inestimable. Ironically, he notes that the 50 or so enormous, large leaf poplars on the course will survive just fine.

"Poplars are the dirtiest, filthiest tree you could have on a course, but, fortunately, nothing can kill them."



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Agriculture Division Baltimore, Maryland



Clean-up strategy for wet, wet turf

- Focus the budget dollars on survival. Get the course clean and safe.
- Expect lots of hand work, due to high saturation.
- Plan to bring in heavy equipment in April, June at the latest.
- Logs, timbers, docks will have to be sawed into manageable pieces and carried to trucks.
- Ryegrass will have to be brought in well in excess of the usual 500 pounds used in a year.
- Fungicide applications on greens and tee boxes will have to go beyond the usual two per year applications.

L.J.

Pest damage mounts

Crows, Canada geese and mallard ducks are expected to do more damage. Crows are the worst, says McDow.

"The critters will chew up this turf like crazy. Going after insect larvae, they will peck the course to death."

Mallards dive to chew up thousands of tufts of turf, pieces of which will be seen floating in the receding lake.

Mud, water, pine needles, a variety of plant and human crud edge the course like a



Andrew Watters, left, and Rick McDow found some dry ground to walk as they surveyed Ballinger's flood damage.

dozen ugly bathtub rings.

"Floods are all a part of the game," says McDow. "Still, it's hard to accept, because, taken in conjunction with our ailing equipment and lost revenue, it makes everything snowball downhill." □

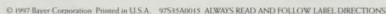
—The author is a writer/photographer based in Edmonds, Wash. Photos by Leslee Jaquette

$T_{\rm HREE}$ out of four who fly prefer merit®.



Now you can get excellent control of mole crickets and control the amount of insecticide going into the environment. Just use a pre-hatch application of MERIT® Insecticide. Because MERIT is effective at low rates, you use less. Which is good news for golfers, golf course workers, fish and birds. But not mole crickets.

To find out more, contact Bayer Corporation, Specialty Products, Box 4913, Kansas City, MO 64120. (800) 842-8020. For mole cricket control, nothing else will fly.







Tee recipe: FEED WELL, AERATE OFTEN

It also helps if the golfers cooperate. These two superintendents know to keep tees healthy and neat.

pike marks and ball divots damage greens.
Tees, on the other hand, get spiked, but they also get thumped by golfers' clubs, and, particularly on Par 3s, shredded by irons.

To keep tees in shape, you

need help from golfers in addition to smart agronomics.

Jerry Coldiron's golfers are good about using the divot mix stationed on all par 3 tees and shorter par 4s, but he doesn't hesitate to jump in with crew support. "We use the sand buckets with ryegrass seed mixed in. On downtimes, we send a crew around with the sand mix," says Coldiron, who also follows an aggressive fertility program at Boone Links/Lassing Pointe in Florence, Ky., as does Corey Eastwood of Stockdale Country Club, Bakersfield, Calif. (see sidebar).

"We have the sand-based, bentgrass tees on Lassing Pointe and the push-up clay tees at Boone Links, which are bluegrass/ryegrass," explains Coldiron. "They're all beginning to transform to the ryegrass, because we've gone to an aggressive topdressing program. We use a seed blend that contains a lighter colored rye, that tends to match in with the bentgrass. We do get some growth variations with the ryegrass, but we're mowing tees

often enough that it's really not a problem.

"But the reality of it is, on a par 3s, with the amount of play and divots that we have, there's just no way to keep the bent aggressive, even though we went with Penncross."

Move the markers

"We have a system in which rangers and employees in the Turf Center move the tee markers many times each day," says Coldiron. "Between the clubhouse staff and our staff, we keep those things hopping, especially on busy days. We can run 300-400 golfers through. If those markers aren't moved, you can tell right off the bat." LM

Golfers at Boone Links/Lassing Pointe are good about using

Aerify four times/year

"Everyone concentrates on green aeration, but it's very easy to let tee aeration slip away," says Corey Eastwood, superintendent at Stockdale Country Club, Bakersfield, Calif.

"Tees should be aerated four times a year if the seasons allow it," says Eastwood. "Follow with your green mix topdressing to improve percolation and compaction."

"Build tees as large as possible," advises Eastwood. "Make tee enlargement a priority unless turf areas are restricted by government agencies.

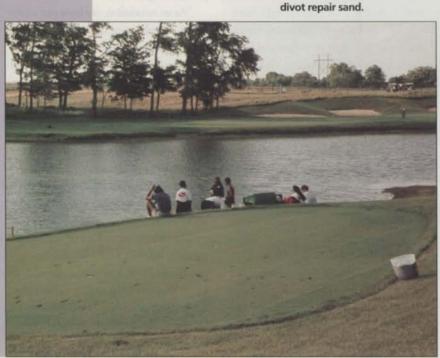
"Mow tees in a square or rectangular pattern. You'd be surprised how many square feet this will add to playable tee area.

"If tees must be round or oval, only do the cleanup lap once per week. This will eliminate the mower wear area on both ends of the tees.

"Have the outside edges of the tees directed down the line of flight. This eliminates complaints that, 'the tee markers are never straight.'"

Other Eastwood tee tips:

- ➤ Fertilize every three to four weeks, along with the greens.
- Use a good, slow-release fertilizer.Don't try to save a couple dollars per bag.
 - Fill or seed divots weekly.
- ▶ In most cases, strip and level tees every five years. This will keep up with settling on the edges and a build-up in the middle due to topdressing.



OPEI spins EXPO web

The Outdoor Power Equipment Institute now reports the latest on its Expo 97 show when you visit the new EXPO web site: http://EXPO.mow.org.

OPEI reports the home page is designed to give an overview of EXPO, with links to more in-depth information by show categories. Included at the site are a listing of all the power and manually-operated products on display at the Louisville show, and a listing of seminars planned for the three-day event. The attendee section features all the highlights of EXPO 97, including daily schedules, Sunday night concert information, hotel lists and pre-registration information. A special section has been written for exhibitors, with exhibit rates and an application for exhibit space.

The Expo is scheduled for July 26 through July 28, 1997. For more information, visit the web site. If you're not on the net yet, call (502) 562-1962. □

Three associations join to train 'ambassadors'

The GCSAA has joined up with Responsible Industry for a Sound Environment (RISE) and the Professional Lawn Care Association of America (PLCAA) in a public outreach effort called the "Ambassador Speakers Program." Goal of the program is to motivate and prepare industry representatives to educate the public about the green industry's environmental benefits and to address consumer concerns. A daylong training session was held in Cincinnati, Ohio, recently for 16 representatives. The pilot program has enlisted eight lawn care operators and eight golf course superintendents from Ohio, Michigan and Pennsylvania. Following the training, each Ambassador agreed to give presentations on industry and consumer issues to civic, community and school groups in 1997.

"We teach the basics, but the basics count: how to prepare an outline from a presentation, how to get rid of the butter-flies, how to prepare a speech," explains Elizabeth Lawder, RISE communications director. "Our goal is to have about 60 ambassadors."

"We start with a little background, but we want to give a vocational [message] as well," says PLCAA President, Terry Kurth of Barefoot Grass, Madison, Wisc. "What we're after is to try to get people in a high school group to get interested in the green industry," says Kurth. "Realistically, they are our future employees, our future customers and they could be the future regulators.

"I have spoken to high school classes in my area about what I do for a living," says Kurth, "and it's amazing to hear the positive comments from students after they learn about the benefits of the green industry. This type of program will prepare our industry to talk to a wide variety of groups and will positively influence our industry's public image."

"As an association, we have put a premium on enhancing the image of the golf course superintendent," says Bruce Williams, CGCS, Bob O' Link Golf Club, Chicago. "I believe it is important to communicate to both golfers and non-golfers the positive impact that green industry professionals have on the environment. This program not only provides a vehicle to communicate that message, but helps create and reinforce the positive image of environmental stewardship to which we adhere."

The groups are seeking engagements for speakers in Ohio, Michigan and Pennsylvania. Anyone who knows of a school or civic group that would be willing to hear about the benefits of healthy turf is asked to call Debbie Rudin at (309) 691-2041. □

USGA turf info on the Web

The USGA's Turfgrass Information File (TGIF) now appears on the World Wide Web. The site contains turfgrass research data and management literature. Find it at: www.lib.msu.edu/tgif.

GCSAA: super certification program turns 25

The Golf Course Superintendents Association of America is in the 25th year of its certification program.

The goal of the program has always been to maintain a comprehensive curriculum of study for member superintendents including: turfgrass management; pest control; safety and compliance; financial management; and organizational management.

To qualify, individuals must be currently employed as a golf course superintendent, have completed a level of post-secondary education, possess superintendent experience and pursure GCSAA seminar continuing education units. The applicant then has one year to complete a comprehensive, six-part exam and go through the attesting process.

The GCSAA membership figure recently topped the 16,000 mark.

"This growth in membership not only mirrors the overall growth of the game, but also reflects our industry's commitment to professionalism," says GCSAA President, Bruce R. Williams, CGCS, of Bob O' Link Glf Club, Highland Park, Ill.

For more information on steps toward certification, contact the GCSAA at (913) 841-2240.

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Gary D. Curl has been named business manager for American Cyanamid's Turf and Ornamental Products Group. Curl had held the post of senior marketing manager at the company since 1994. As business manager, Curl handles sales and marketing responsibilities for the green industry's professional lawn care and golf course markets.

Plowtronex PSI of Dallas will purchase Commercial Pump of Swanton, Ohio. Flowtronex is the world's largest maker of golf course pumping systems with the industry's largest sales and service network. Commercial Pump will retain its name and personnel. Dave Brockway, president of Flowtronex PSI, says the buy will improve the company's service to golf

courses, particulary those in the Midwest.

R.F. Morse & Son, Inc., New England supplier of seed, fertilizer, chemicals and power equipment, has acquired Earth Works, Inc., the soil restoration specialists based in Old Greenwich, Ct. Richard Canning, president of RFM says the buy will help Morse expand operations within the golf course market in New York and New Jersey with soil restoration, custom overseeding, Hydroject aeration, fertilization and other turf management services.

Pursell Industries, Inc. and Pursell Technologies, Inc. were co-hosts and sponsors of the first Pursell Cup Charity Golf Challenge at Shoal Creek Country Club, Birmingham, AL. The event raised \$20,000 in support of charitable efforts related to juvenile diabetes.

Seed Research of Oregon, Inc. now has a Web Site. Their site, www.peak.org/~sroseed, includes information on company research; turfgrass varieties; information on endophytes; and a list of SRO product distributors. The company also offers information on how to obtain the Seed Research Seed Specification Manual, Golf Courses of North America.

Also on the web is **Terra Industries**. The address is: www.terraindustries.com. "Our initial purpose is to provide our customers easy access to product information," says

Web Site Manager, Jeff Keiser. "Ultimately, we anticipate our site will handle order entry and product tracking, and link other information sources useful to our customers." Terra produces and markets nitrogen fertilizer, control products and seed.

By calling up **Reading Body's** web site— www.reading-body.com—truck equipment specifiers/buyers have immediate access to a multitude of truck equipment options.

Vermeer joined the information superhighway. Use your computer to access www.vermeer.com to get to **Vermeer Manufacturing's** latest attraction on its web site, *Vermeer at Work*, a collection of field story summaries detailing Vermeer equipment getting the job done.

The lastest edition of Walker Talk is on Walker's web site (www.walkermowers.com), along with product information and a section for inquiries about local distributors and dealers of Walker mowers.

Agro-Tech 2000 has merged with Organica, Inc., Great Neck, NY. Agro-Tech 2000 developes and markets environmentally-friendly products for golf courses, sports turf and landscapers. Organica is a biotechnology company. Agro-Tech 200 will retain its name. "The difference for our customers is that now a wider range of more effective natural products will be available," said Peter van Drumpt, CEO of Agro-Tech 2000.

Info center

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COMPOST MARKETING KNOW-HOW... Winning the Organics Game: The Compost Marketer's Handbook, contains more than 250 pages of data and real-life examples related to marketing organic products in bag and bulk forms. Topics covered include: retail markets; sports turf markets; agricultural markets; and sales management. The book is authored by Rodney W. Tyler, former vice-president and current marketing committee member of the Composting Council. The book sells for \$59.95. To order, call ASHS Press at (703) 836-2418; fax orders are taken at (703) 836-6838.

EROSION INSIGHTS... The Erosion Discussion newsletter is a new technical publication from North American Green to professionals with erosion and sediment control concerns. The newsletter provides insight into industry standardization, regulation and advancements in materials and technologies. A free subscription can be yours by calling the North American Green Technical Services department at (800) 772-2040.

PLANT HEALTH CARE CATALOG...Plant Health Care, Inc. offers a free 12-page brochure on products essential to the 'plant health care' approach, including mycorrihizal fungi, beneficial bacteria, natural soil conditioners and time-release water-absorbing gels. The catalog also provides information and technical information on the natural systems apprach to plant health that is reported to help plants live longer at lower maintenance levels. To order, call (800) 421-9051.

Events

FEBRUARY

- 5-7: Turfgrass Producers Int'l Midwinter Conference, Savannah Marriott Riverfront, Savannah, Ga.; Tom Ford, (847) 705-9898; (847) 705-8347.
- 6-7: Northern California Turf & Landscape Council, Santa Clara Convention Center, Santa Clara, Calif.; Phil Reiker, (510) 505-9600.
- 6-7: Northern California Turf and Landscape Council Expo; (510) 505-9600; (510) 505-9609.
- 6-9: Association of Professional Landscape Designers Winter Conference, St. Petersburg Beach, Fla.; Jack Lagershausen, (312) 201-0101; (312) 2010214
- 10-12: GCSAA Golf Course Conference & Show, Las Vegas Convention Center, Las Vegas, Nev.; Rebecca Spriggs, (800) 472-7878.
- 11-12: Pa. Nurserymen & Allied Industries Conference, Hershey Lodge and Convention Center, Hershey, Pa.; Pat Stroble, (717) 238-1673.
- 12-13: "ALCA University" workshop, managing front-line employee performance, Hinds Community College, Raymond, MS, sponsored by Hinds Community College, Mississippi Nurserymen's Association and ALCA. Call ALCA at (800) 395-2522.
- 13: PLCAA Workshop, "Heads-Up Training— How to Teach in the

- Workplace," featuring practical teaching tips and techniques that you can implement on the job immediately; New Brunswick, N.J. For a brochure, contact PLCAA at 1000 Johnson Ferry Rd. NE, Suite C-1135, Mariettaa, GA 30068; (800) 445-3466.
- 16-18: Ohio Tree Care Conference & Trade Show, Worthington, Ohio. Sponsored by the Ohio chapter of the ISA. Call (614) 433-0045.
- 16-19: ALCA Executive Forum, Acapulco, Mexico. Call ALCA at (800) 395-2522.
- 17: ALCA University workshop, managing front-line employee performance, The Holiday Inn West, Hilliard, Ohio, sponsored by Ohio Nursery and Landscape Association, Ohio Landscapers Association and ALCA. Call ALCA at (800) 395-2522.
- 18-19: OSU Professional Lawn Care Short Course Holiday Inn on the Lane, Columbus, Ohio. Phone Barbara Bloetscher (614) 292-4230.
- 19-22: Outdoor Power Equipment Distributors Assn. Meeting, Sheraton El Conquistado Resort, Tucson, Ariz. For reservations (800) 325-7832.
- 21-22: ALCA Masters in Management, San Francisco. Call ALCA at (800) 395-2522.
- 22-March 2: Southern Spring Show, Charlotte

- Merchandise Mart, Charlotte, NC. Call (704) 376-6594.
- 24-25: Turf and Grounds Exposition, Holiday Inn Suffern, Suffern, NY. Contact New York State Turfgrass Association (518) 783-1229.
- 25-26: Southern Illinois Grounds Maintenance School, Gateway Convention Center, Collinsville, IL. Contact Ron Cornwell (618) 692-9434.
- sion Control Conference and Trade Exposition-Nashville, TN. Call International Erosion Control Association (800) 455-4322 or (970) 879-3010; E-mail: ecinfo@ieca.org.

25-28: International Ero-

- 25-27: Athletic Field Construction & Maintenance, Rutgers University, New Brunswick, NJ. Phone (908) 932-9271.
- 25-27: Western PA Turf Conference & Trade Show, Pittsburgh Expo-Mart/Radisson Hotel, Monroeville, Pa. (412) 837-1402 or (814) 863-3475.
- 26: New Jersey Landscape '97, Meadowlands Exposition Center, Secaucus, NJ. Call Skip Powers (201) 664-6310.

WARCH

- 3: Michigan Forestry & Park Association Winter Meeting, Holiday Inn South Convention Center, Lansing, Mich. Phone (517) 482-5536.
- 4: Turfgrass Managers of Western North Carolina Conference, Great Smokies

- Holiday Inn Sun Spree Resort, Asheville, NC. Contact the Turfgrass Council of NC at (910) 695-1333.
- 5-9: FloralScape '97, Cleveland (Ohio) Convention Center. Sponsored by the Cleveland Botanical Garden. Call Ann Fairhurst-Stephens, (216) 721-1695.
- 7-9: The Tampa Spring Expo, Florida State Fairgrounds, Sheraton Tampa East, Call the Tampa Bay Wholesale Growers Association, (813) 960-1457.
- 9: Arborist Field Day & Jamboree Florida State Fairground
- Florida State Fairgrounds (part of the Tampa Spring Expo). Call (813) 960-1457.
- 7-9: Capital District Garden & Flower Show Knickerbocker Arena, Albany, NY. Call (518) 356-6410 ext. 418 or (518) 786-1529.
- 8-16: Chicago Flower & Garden Show Navy Pier on Chicago's lakefront. For show infor
- lakefront. For show information call (312) 321-0077.
- 9: Arborist Field Day & Jamboree
- Florida State Fairgrounds (during Tampa Spring Expo). Call (813) 960-1457.
- 12-13: Reinders 13th Turf Conference
- Waukesha Expo Center, Waukesha, Wis. Contact Ed Devinger, Reinders Inc., (414) 786-3301 or (800) 785-3301. LM

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Vermeer Manufacturing Company offers wireless remote control for its stump cutter line. The radio remote control system option provides the operator more flexibility when positioning the machine in tight areas, and freedom of movement in an operating range of up to 100 feet from the machine. Currently available on the SC 1102 and SC 502 gearbox-driven stump cutter with Vermeer's Auto Sweep feature.

Powered by a common 9-volt battery, the device, weighting 3 lbs., will control the rate of the direction of the stump cutters tongue, moving the cutter wheel in and out of stumps. It also runs the up/down wheel positioning mode, and the swing of the cutter wheel in its sweep pattern. It's equipped with an emergency stop control.

Call Vermeer toll free at (888) 837-8337 and tell them you read about its remote control in LM or,

Circle No. 293

Riverdale's granular fungicide ready for action

Patchwork 0.78% Granular Fungicide is available from Riverdale. It is labelled for the preventive treatment of Necrotic Ring Spot, Summer Patch, Fusarium Blight, Take-



All-Patch, and Spring Dead Spot. It is cleared for use on golf courses (including greens and tees), parks, athletic fields, sod farms and similar commercial and residential areas. The product contains Rubigan.

Learn more about Patchwork, available in 20-lb. bags, by calling Riverdale Chemical Company (800) 345-3330 or (708) 754-3330, or

Circle No. 294

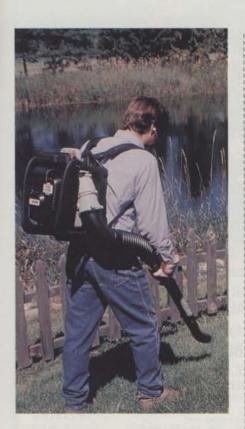
Plant Saver gets plants off to strong start

Plant Health Care, Inc.'s Mycor Plant Saver mixed into the soil, ensures better survival and growth of new plantings by increasing feeder root growth and function. It can be used on all perennials, shrubs, vines and landscape plants. It is particularly helpful for new and existing plants grown in landscapes, urban environments, and other turf sites with drought conditions and compacted soils.

Mycor Plant Saver is a granular formulation that contains a blend of slow-release fertilizer, chelated micronutients, organic proteins, humic acids, nitrogen-fixing/phosphorus-solubilizing bacteria and superior strains of endo- and ectomycorrhizal fungi.

For more information or to request PHC's catalogue, "Green for Life: A Survival Guide," call (800) 421-9051 and tell them LAND-SCAPE MANAGEMENT informed you, or

Circle No. 295



Less noise from twostroke blower

Echo reports its blowers have substantially reduced dBa ratings for much quieter operation.

The company calls its new PB-46LN "the quietest two-stroke blower on the market today. It meets or exceeds virtually all current noise standards without sacrificing performance."

Features include:

- ▶ Echo commercial-duty, 44.0-cc, dualpiston ring, engine with Pro-Fire electronic ignition and purge-pump equipped carburetor for fast, easy starts and steady power flow.
- ▶ Fully adjustable hip-throttle assembly with cruise control is designed in for improved control and superior user comfort and durability.
- ▶ 65 dBa at 50 feet, which is a 50 percent reduction over the preceding model, the PR-4600

For more information, contact Echo at (847) 540-8400, and be sure to say you read it here, or

Circle No. 296

New blower 30 percent stronger

The new 11-hp commercial blower from Little Wonder makes quick work of

clean-up jobs. The fan and fan housing have been enlarged to increase air flow, and the discharge chute has been widened to maximize performance.

A 10-inch pneumatic front wheel and two 10-inch pneumatic rear wheels make it a breeze to push this unit over even the toughest terrains.

An adjustable, ergonomically-designed handle with a new, anti-vibration grip improves the balance and the feel of the machine.

> To learn more about all Little Wonder machines, call the company at (215) 357-5110, and say you saw it here, or,

> > Circle No.297





Affordable two-way radio

SMR Direct has made two-way radio communication more affordable, with basic service that starts at \$19.95 per month for unlimited air time, and no charge for all radio equipment.

Equipment can be shipped by 2-day delivery at no charge.

For more information, call SMR at (800) 516-8993 and tell them you got the message in LANDSCAPE MANAGEMENT, or

Circle No. 298

High power and torque with this blower

The 225HBV blower from Husqvarna weighs 11.2 pounds, and has the high power and torque already included in other Husqvarna blowers.

The blower has a 25.4-cc cylinder volume, and a maximum air velocity of 128 mph.

Advancements in ergonomic design include springs and rubber mounts to separate the engine from the handles, which Husqvarna calls its Low Vib anti-vibration system. The natural blowing force lifts the unit slightly, to cause an ideal wrist angle that also promotes user comfort.

The blower features an optional 16:1 mulching capacity. All that is needed to turn the 225HBV into a high-powered mulching vacuum is a kit that includes the necessary tubes, bag and strap.

For more information, contact Husqvarna at (704) 597-5000 and mention LANDSCAPE

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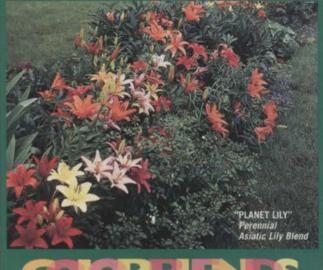
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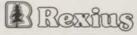
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