

Real-Life Solutions

■ RIVIERA CC, PACIFIC PALISADES, CALIF.

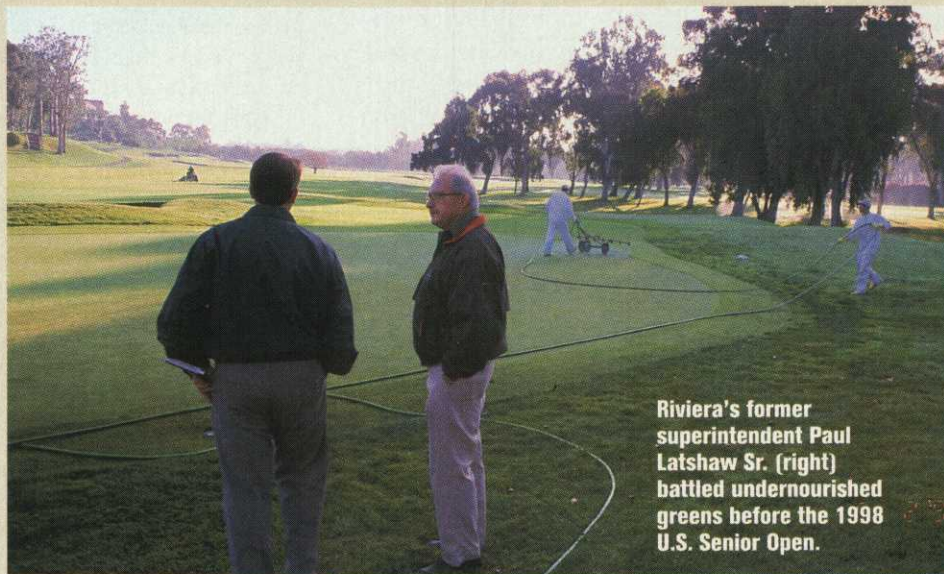
High-Traffic Headaches

A superintendent employed biological products to increase turf strength on greens so they could endure an increase in players

BY FRANK H. ANDORKA JR.,
ASSOCIATE EDITOR

Paul Ramina surveyed the greens at Riviera CC when he became superintendent there in July 1998 and recognized quickly that challenges lay ahead.

George C. Thomas designed the championship course, located in Pacific Palisades, Calif., in 1927, and insisted on including his signature small greens in the project. Over the years, rounds slowly increased as Riviera's stature grew. An aggressive membership drive in the 1980s expanded the number of players at the



Riviera's former superintendent Paul Latshaw Sr. (right) battled undernourished greens before the 1998 U.S. Senior Open.

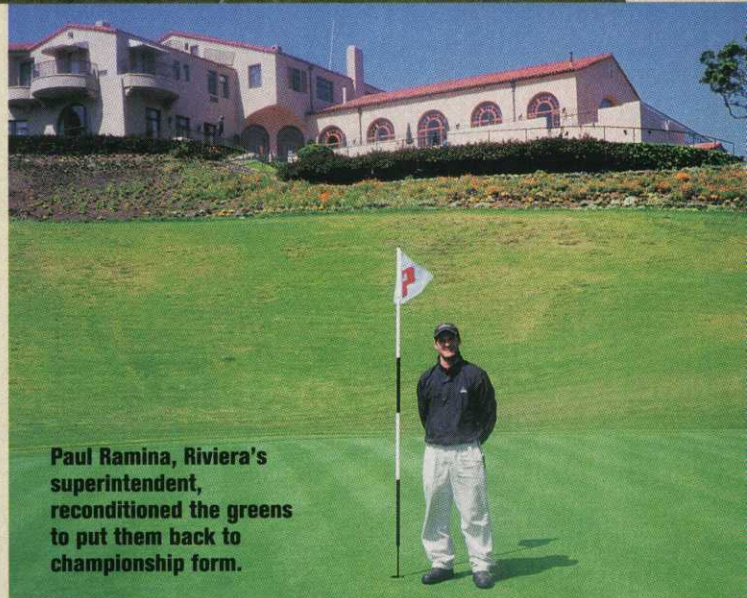
course, and rounds nearly doubled from 40,000 in the late '70s rounds to 70,000 last year. As a result, the greens took a beating.

But Riviera couldn't enlarge the putting surfaces to accommodate more traffic without destroying the course's character. By the time Ramina arrived, the greens needed help.

The problem

Riviera's greens suffered from poor nutrient retention in the soil, resulting in thin, weak turf. Ramina decided to recondition the soil to increase turf strength, and he wanted a one-stop shop where he could purchase products to help him do that. "When you're in competition to host major tournaments the way this course is, you must have greens that meet high expectations," he says.

"Soil balance is vital to



Paul Ramina, Riviera's superintendent, reconditioned the greens to put them back to championship form.

keeping turf healthy, but you have to figure out how to balance it on a micronutrient level," Ramina says. "It's not enough just to throw out a number of products and hope that some of them help. You have to tailor your program to fit the needs of your course."

At the Links at Challedon

in Mount Airy, Md., where Ramina was employed before he came to Riviera, he worked with Floratine, a Collierville, Tenn.-based turf products company. Floratine provides biological products including soil amendments, fertilizers and soil oxygenators. Ramina was im-

Continued on page 62

Problem

Nearly 70,000 annual rounds of golf ravaged Riviera CC's small greens, stressing out the turf and creating compaction.

Solution

A combination of products, along with an aggressive aeration schedule, improved the greens dramatically.

Continued from page 61
pressed with the company and its products, and he was convinced that Floratine should be involved in the Riviera green restoration.

So he called Bill Byrnes, Floratine's president, and asked him to assess Riviera's greens to see if his products could help. Byrnes says targeted treatment of damaged turf requires more than just an over-the-phone description of the problem.

"Prescription without diagnosis is malpractice, and that applies to turf companies as well as to doctors," Byrnes says. "Despite what we're all striving for, there's no silver bullet. You have to get down on the ground to find out precisely what the grass needs before you start suggesting chemical solutions."

Ramina took soil and plant-tissue samples and had them analyzed by an independent laboratory. The results weren't good.

"A residual thatch layer prevented nutrients from getting through to the soil, and the greens weren't feeding as well as they needed," Byrnes says. "Good grass was hard to grow under those conditions."

The test results showed that the turf lacked sufficient potassium, phosphorus and nitrogen and calcium.

The solution

Byrne's first recommendation was to use a foliar biostimulant called Astron, which provides grass with immediate nutritional needs. It also contains slow-release nutrients that penetrate plant

leaves to feed them over a longer period of time.

"We're looking for long-term solutions, not just quick fixes," Byrnes says. "You want to feed the turf immediately, but you also want to provide for it over time."

Ramina also used Floratine's Knife product, a fortified iron supplement for quick, long-lasting greening of all grasses; and CalpHlex, a calcium supplement for nutrient balancing, salt reduction and pH management.

Ramina saw improvement within 24 hours of the first foliar application and soil conditions improved almost immediately.

Riviera's maintenance crew also began an aggressive aeration program that broke up the thatch layer. Ramina also noticed the turf recovered from injury more quickly.

But the true test of the program was how the pros reacted to the greens.

"The players had nothing but good things to say about the greens at the Nissan Open in February — a complete reversal since the 1995 PGA Championship, when everyone complained about the greens," Ramina says.

Ramina and Byrnes continue to work together to keep the greens in top condition.

"We know that not everyone has the budget that Paul (Ramina) has, so we're willing to work with all superintendents to find a plan that will fit within their budgets," Byrnes says. ■

Tips:

Maintaining Ponds

How often do you see ponds on golf courses that appear to contain more algae than water and emit the unpleasant aroma of a sewage treatment plant? The cause of algae is most likely from an overabundance of nutrients in the water. Elevated nutrient levels often result from chemicals, fertilizers, salts, oils, sediment and other compounds that travel in storm water and runoff and empty into ponds.

While such sickly ponds aren't the picturesque settings outlined in original architectural drawings, they can be rejuvenated with a little investigating, some initial labor and a touch of Mother Nature.

Here's what you can do:

- Reduce the amount of nutrients getting into the storm water and runoff by buffering fertilizer use in areas that may run off into the pond.

- Take some tips from Mother Nature. Did you ever notice how most natural ponds have plants like cattails, iris, reeds and rushes along their shorelines? These plants not only look appealing, but they have functional values.

The storm water and runoff entering a pond has to travel through the plants' barriers before mixing into the pond. The plants slow the water, thus reducing shoreline erosion commonly seen with a grass-edged retention pond. Less erosion results in less sediment and debris clouding up the water.

The plants also reduce nutrient levels. The plants use excess nutrients as a food source, eliminating a good portion of nutrients that would otherwise cause algae blooms.

- Work with nature, not against it. Chemicals, while providing a quick fix to the problem, may not be the long-term answer.

The addition of bacteria and enzymes to a pond to maintain water quality and clarity is an ecologically sound alternative to chemicals. The bacteria and enzymes feed on decomposing matter such as leaves, seeds, fish and animal waste and consume large amounts of nutrients.

- It's important to provide oxygenated water throughout depths of the pond for beneficial bacteria and enzymes to survive. Waterfalls, streams and fountains do provide good oxygenation, but they only effectively aerate the top four feet of a water body. Ponds six feet and deeper require supplemental aeration systems to maintain good water quality.

Aeration disks are a popular method of providing aeration to deeper portions of a pond. A disk is placed on the bottom of a pond, and a small air compressor housed along the shoreline pumps air through weighted poly tubing to the disk. The disk then disperses tiny bubbles of air into the water. The bubbles of air cause the water in the deeper portions to rise to the surface and exchange oxygenated water from the surface to the deeper portions of the pond.

Aeration systems help provide adequate oxygen levels in deeper water so the beneficial bacteria and enzymes can reduce the debris and improve water quality.

Editor's note: This article was written by Dave Kelly, technical manager for Batavia, Ill.-based Aquascape Designs. For more information, call 800-306-6227

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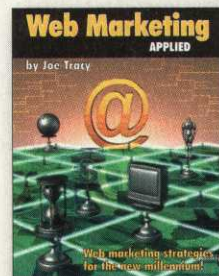
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every month for great deals and one of our favorite jokes!

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CIRCLE NO. 201



Herbicide

Precision Laboratories offers Delux, a biodegradable activator surfactant and ammonium sulfate premix formulated to enhance the performance of generic glyphosate and certain postemergent herbicides on hard-to-control weed species. It functions by tying up antagonistic hard-water ions and providing ammonium ions for improved herbicide uptake under stressful growing conditions.

Delux is safe to sensitive turfgrass species and should be used with phenoxies and generic glyphosate herbicides to improve control.

For more information, contact 847-498-0800 or

CIRCLE NO. 202

► Turf equipment

Some of the most popular pieces of equipment manufactured by **Textron Turf Care And Specialty Products** are packaged together to create the Classic line, which offers five equipment combinations available for \$99,995. The Classic Combinations include a mixture of Jacobsen, Ransomes, Cushman and Ryan products.

For more information, contact 888-922-TURF or

CIRCLE NO. 203



Revolving brush

Terracare Products introduces the economy Terrabroom, a revolving brush that sweeps topdressing into aerating holes. It fills aerating holes to the bottom of the hole with little or no bridging of material across the top of the hole. With the soft brush, it can be used in hot and humid weather with no damage to the grass, according to the company. It's also designed to follow contours.

For more information, contact 608-429-3402 or

CIRCLE NO. 204

Rope, rope stakes

Par Aide introduces rope stakes and rope. The rope stakes are recycled plastic hazard/OB markers that never need painting and can be pounded into the ground. They are designed with an easy-to-use open slot for stringing rope.

The stakes are available in hunter green or white and in 12-, 18- and 24-inch lengths with five-sixteenths-inch, stainless-steel spikes. The quarter-inch braided polypropylene rope comes in spools of 1,000 feet.

For more information, contact 888-893-2433 or

CIRCLE NO. 205

Postemergent herbicide

Lesco has added Prosecutor to its line of postemergent weed control products. Prosecutor is a broad-spectrum, non-selective herbicide containing 41 percent glyphosate, which systematically controls weeds even without complete coverage.

The product mixes readily with water, meaning minimal tank agitation is necessary for a uniform mixture, according to the company. It has no soil residual or root uptake, so reseeding can take place after only seven days.

For more information, contact

800-321-5325 or

CIRCLE NO. 207



▲ Pneumatic grass seeder

RotaDairon has developed a pneumatically powered, multi-purpose combination soil renovator and seeder. The model RMA300 and RMA400 are a combination of soil renovators and pneumatic seeders. The model SMA305 and SMA405 are primary pneumatic seeders.

For more information, contact 610-225-0761 or

CIRCLE NO. 208

Fungi stimulant

Plant Health Care introduces Colonize, a vesicular-arbuscular mycorrhizal (VAM) fungi stimulant that improves root colonization in turf. Colonize contains an isoflavone derived from the roots of stressed clover plants. Studies show the isoflavone stimulates the growth of VAM fungi, which forms symbiotic relationships with endomycorrhizal grass species, such as bentgrass and bermudagrass.

For more information, contact 800-421-9051,

www.planthealthcare.com, or

CIRCLE NO. 206

Leaders

PEOPLE ON THE MOVE

Ken Ehlen was named director of golf for The CottonFields GC of Laveen, Ariz.

George Morgan, CGCS at Chartiers CC in Pittsburgh, received the Distinguished Service Award from the Pennsylvania Turfgrass Council. The award honors a lifetime of dedication to the advancement of the turfgrass industry in Pennsylvania.

Eric Thompson is the salesman of the year for Roberts Supply, an outdoor power equipment and parts distributor in Winter Park, Fla.

Rain Bird promoted **Pat Loper** to manager of central control for its golf division. Loper was previously central control brand manager for the company.

Matthew Wong joined e-Greenbiz.com's board of directors. e-Greenbiz.com also named its

board of advisors: **John Thompson**, CEO of The Nurseries Co., Beltsville, Md.; **Henry Huntington**, president of Pleasant View Gardens, Loudon, N.H.; **Manfred Muecke**, founder and vice president of research and development for Hortocopia, Purcellville, Va.; **Charlie Pick**, vice president of Garden-Ville, San Antonio; **George Atkinson**, director of marketing, Zelenka Nursery, Grand Haven, Mich.; **John O'Malley**, president, Legacy Landscaping, Houston; **Andy Crawford**, sales manager of Daylily Nursery, Rock Island, Tenn.; and **Gretchen Marx**, vice president of K-Rain Manufacturing of Riviera Beach, Fla.

Bernhard Leinauer joined the New Mexico State University Cooperative Extension Service as an assistant professor and turfgrass specialist. He was formerly a research associate at Michigan State University.

agent of sales.

Darwin N. Davis was named chairman of the board of the National Minority Golf Foundation, replacing **Joe Louis Barrow**, who resigned to become national director of The First Tee. Davis is a former senior vice president of The Equitable Life/AXA Co.

Van Waters & Rogers named **Ted Worster** to the new position of product/project manager.

The Musser International Turfgrass Foundation presented its 2000 Award of Excellence to **Matthew J. Fagerness**, a Ph.D. candidate at North Carolina State University. Fagerness will receive \$15,000 to continue his education.

ServiScape named **Ralph K. Dain Jr.** as general superintendent to man-

age maintenance of ServiScape's golf course clients.

Edward Beidel joined the golf course architecture firm of Daft-McCune-Walker in Towson, Md.

Jerry Helm joined Elwood, Ill.-based Tyler Enterprises as a sales representative. **John Gronnett** assumes responsibility as a driver supporting product delivery for Tyler golf course customers in Ohio and northern Kentucky. **Mark Gross** is warehouseman for the acquired distribution facility in Cincinnati.

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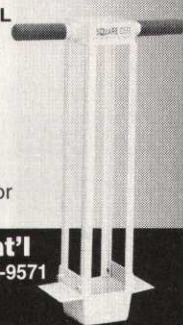
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Golfdom's Joke of the Month



Question:

What are the four worst words you could hear during a golf game?

Answer:

IT'S STILL YOUR TURN!

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Out of Bounds

■ SOMETHING COMPLETELY DIFFERENT

horseshoes

IF YOU BUILD A PIT,
YOU COULD GET
HOOKED ON THIS
GAME THAT'S
PERFECT TO PLAY
ON A LAZY SUMMER
AFTERNOON

BY MARK LUCE



In my never-ending quest to perfect the art of leisure, I surveyed my backyard and came up with two options — build a basketball court or a horseshoe pit. I opted for the latter because a horseshoe pit was a better fit for my humble little acre and my increasingly achy bones. Besides, a basketball court cost about \$1,500 to build.

Roman soldiers invented horseshoes, which is popular throughout the world. The game became big in America, thanks to the British, around Revolutionary War time.

In 1909, in the tiny hamlet of Bronson, Kan., the first world horseshoe tournament was held. In 1914, the Grand League of the American Horseshoe Pitchers was formed in Kansas City, Mo. The league members standardized the rules, specifications and procedures of the game that's played by millions but perfected by few.

If you want to learn horseshoes, you can't just pound a couple of stakes into the ground and start playing. You must do a little work. However, using the following steps, you can have a horse-

shoe pit with a day's work and a few trips to the hardware store.

What you'll need — First, check the local hardware store for a decent set of horseshoes and stakes. This will cost between \$30 and \$40.

Look for the Diamond brand, known for its sturdy shoes and rugged stakes. Avoid plastic horseshoes because they're inferior.

You'll need Sakcrete, a \$4 to \$6 50-pound bag of just-add-water cement mixture to set the stakes. Also required is about 400 pounds of sand, which can be bought in bulk and hauled in a truck or sold in 50-pound bags for about \$3 apiece. True sportsmen may opt for synthetic or blue clay, but it takes more maintenance than sand.

If you don't have a shovel or a tape measure, you'll need those, too.

Building the court — The official dimensions of a horseshoe court are 50 feet by 6 feet. You can alter the length if your yard isn't big enough.

Measure the court and place a marker in each of the corners so you can see the dimensions. Then measure 3 feet in from the center of each end

and mark a spot where the stakes go.

The size of the pit is 4 feet deep and 3 feet wide. Using the position of the stake as a guide, measure off the area of both pits. That means 1.5 feet toward each side, and 2 feet to the front and back.

Time for the elbow grease — Start digging and try to get the pit as level as possible. In the pit's center, dig a pyramid-shaped hole that's 6 inches deep. The stakes, which are 27 inches tall, should project 21 inches.

Mix the Sakcrete in a 5-gallon container, set the stakes in the ground at a 12-degree angle and pour the cement. Let dry overnight.

Almost home — The next day, check to make sure the stakes are secure. Then spread a thick layer of sand over the pit area.

Technically, you're finished and ready to play. However, there are still some things you can do to make the pit more attractive, such as a brick outline or railroad ties behind the pit.

Then it's time to play. The scoring is simple — a ringer scores three points, and closest to the stake (within 6 inches) scores one. Officially, you should play to 40. But it may be better to play to 15 when first learning the game — unless you're patient.

Horseshoes is not a fast game, nor is it meant to be. It's perfect to play before and after a barbecue or on a lazy summer afternoon. Remember to take your time, enjoy the outdoors and, as in all things leisurely, a little gamesmanship can go a long way, especially in a tight game.

Mark Luce lives, writes and pitches horseshoes in Lawrence, Kan. You can e-mail him at mluca@earthlink.net.

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- High Ca, Mg, & K Affinity. Low Na Affinity
- Vacuum Swept to Remove Fines & Dust



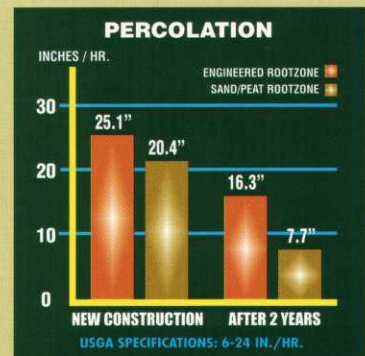
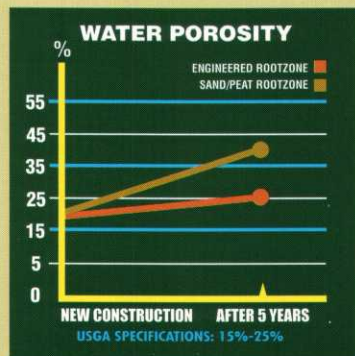
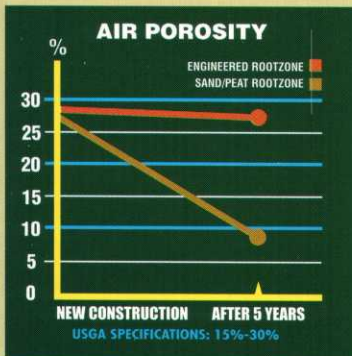
THIS!



NOT THIS!

Scientifically Engineered Rootzones

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- USGA Approved Lab Soil Analysis • Particle Size and Performance Matching
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