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Spilled Chemicals

Continued from page 40

everything you can to isolate a spill."

You should also train staff members in proper pesticide handling, says John Kopack, superintendent of The Legacy Club at Alaqua Lakes in Longwood, Fla. But keep training simple so employees don't get confused, he says. "Everyone has to have the same understanding of what needs to be done in case of an accident so they don't panic in a crisis," Kopack says.

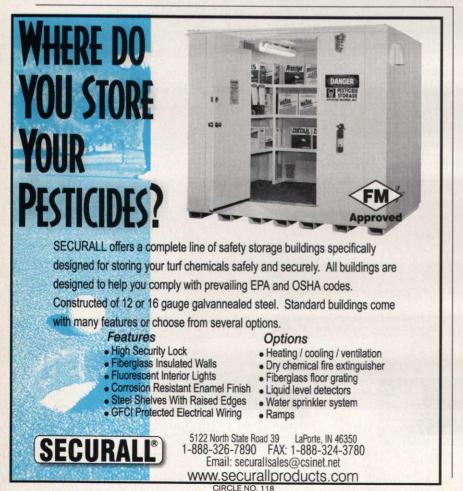
Roger Barrett, superintendent at Stevinson Ranch GC in Stevinson, Calif., says it also pays to keep close supervision on what crew members are doing as they mix chemicals before they take them on the course.

Barrett says that either he or one of his assistants ensure the building is clean so there's no runoff on that could damage the environment. "Not only do we put our people through an extensive training program, we also keep fairly close watch on what's going on," Barrett says.

Getting local authorities involved in the planning is vital, Barrett says. The fire department in Stevinson mapped the course so it knows where the chemicals are in case of a spill, he says. Barrett is also required to report his chemical inventories to the state every month. Spence says he also works closely with the fire department and state authorities so everyone knows what chemicals The Country Club uses.

To keep track of paperwork, Barrett and Spence have one employee dedicated to keep inventories and material safety data sheets current. If there's a problem, that employee becomes the liaison between any hazardous material crews and the course. "That's a full-time job," Spence says.

But no matter how involved your planning is, you need to know what to *Continued on page 44*



CARING FOR CHEMICALS

Here are some tips on how to build the best chemical storage facilities:

- The foundation should always be concrete. The subgrade should be properly prepared to prevent frost heaving or sinking.
- Consider building a raised concrete foundation that is 10 to 12 inches above ground level to provide more protection against flooding.
- The floor should be sealed with epoxy or another impermeable coating to prevent materials from being absorbed into the concrete and to make cleanup easier.
- The facility should have a raised, 4to 6-inch concrete berm around the perimeter to contain liquid spills and direct the spilled material into one or more floor drains.
- The floor should slope slightly toward drains to make washdowns easier and prevent rinsed material from standing.
- The floor drains should allow for rapid sealing and/or lead to a buried tank that can hold 500 gallons or more of spilled or rinsed materials.
- The tank should be installed next to, not under, the facility to make the pumping out of the material easier.
- Vent fans are essential at all facilities. Each room within the building should be vented separately.
- Though regulations only call for a total air exchange six times per hour, an ideal air exchange should be more rapid – up to once per minute. A single, standard 20-, 24or 36-inch vent fan should suffice.
- All electrical fixtures and wiring should be non-explosive, and a single switch should operate both lights and vent fans. Consider mounting the switch outside the facility so the ventilation system can be operating before a worker enters.

Source: Golf Course Maintenance Facilities: A Guide to Planning and Design, GCSAA.



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Spilled Chemicals

Continued from page 42

do in case of a spill. First, contain the spill in as small an area as possible. Richardson says myriad products will help a superintendent do that, from kitty litter to "chemical pillows," which absorb the chemicals to keep them from spreading.

Once a spill is contained, a course should call its local fire department to alert it to a spill and coordinate cleanup plans, she says. Richardson suggests a course install a pump in its storage facility that can move chemicals back into a sprayer. A sump pump installed in the floor can help with the process, she says. Barrett says his system is designed to do that.

"Our whole system is predicated on keeping it closed so that nothing can escape," Barrett says. "We want to make sure that if anything spills, we can stop it from spreading and, when possible, use it again. Fortunately, we've never faced that situation."

So what happened to that 700 pounds of Turcam that spilled at The Country Club? Spence gathered crew members together to brainstorm for a solution. Their first instinct was to water the insecticide into the ground, but Spence thought that would spread the chemical to a wider area instead of containing it.

So instead of making the problem worse, the staff modified a high-power vacuum — turning it into a wet-dry vacuum with separate chambers and filters — to suck the product off the turf. After donning protective clothing — boots, gloves and safety goggles — and rolling a portable generator out to the site to plug in the vacuum, Spence and his crew tried their solution and it worked.

"First, we scooped as much of it off with shovels as we could and put it back into the trailer," Spence says. "Then we brought out our modified vacuum and went to work."

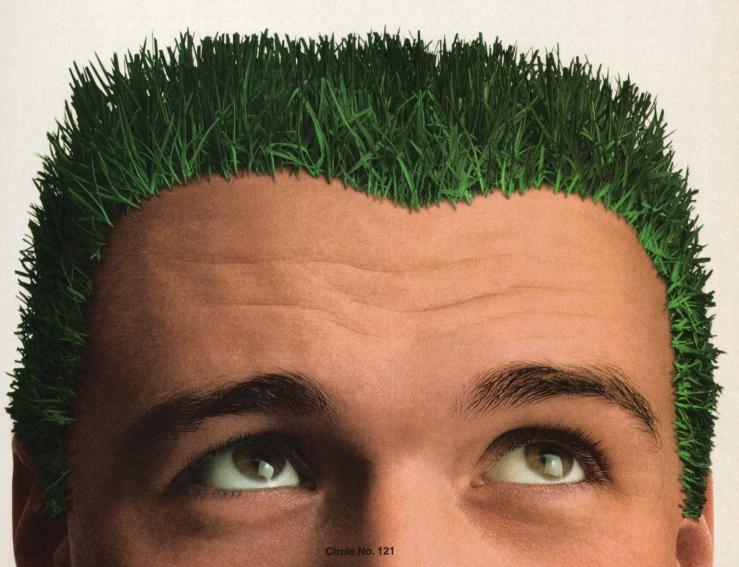
He's glad his crew knew what it needed to do and was able to execute the cleanup plan with little disruption to the course. "Cool, clear thinking prevails when you plan ahead," Spence says. ■

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66

f I start to ramble, you reel me in," Serge Asensio requests. "OK?" Sure thing, Serge. Thirty minutes later, Asensio's batteries are going strong with no sign of weakening. But I don't try to reel him in because he's not rambling.

Asensio is just so passionate about GolfTrak, his market-share tracking program for golf courses, that he's fired up to talk about it. There's a big difference between passion and the gift of blab.

Asensio has reason to be excited about his product. GolfTrak seems like an excellent marketing tool for golf courses that need to get a better grip on their operations. Asensio, the former competitive analysis department director for Marriott Hotels, says golf courses "have lagged woefully behind" other industries in their ability to measure market share.

Asensio says Golf Trak can provide answers to the following questions of golf course operators:

- Is my course overpriced or underpriced?
- Was last month's special successful?
- Would a \$5 increase affect market share?
- What kind of revenue increase should I budget for next year?

What operator wouldn't want this information? Well, Asensio says in a somewhat flabbergasted tone, many golf course operators aren't interested in pricing concepts.

"They just kind of put their fingers in the air to figure out pricing," he says. "They're not sophisticated when it comes to pricing and market-share analysis."

Golf course operators may utter a collective "ouch" after hearing Asensio's critical statements. But is he correct?

Maybe Asensio is saying this to plug his sluggish business. But who can argue that courses *wouldn't* benefit from the information he can offer? "There are 13,000 public courses, and nobody's keeping track of who's doing what," Asensio insists.

A sticking point in GolfTrak's information gathering process is that several courses in an area, not only one or two, must agree to undergo the market-share analysis.

"I need a minimum of four courses in a marketplace to get a report published," Asensio says. "But it has been a challenge to get them."

Are You Keeping Track of the Track?

BY LARRY AYLWARD



GOLF COURSES "HAVE LAGGED WOEFULLY BEHIND" OTHER INDUSTRIES IN THEIR ABILITY TO MEASURE MARKET SHARE All of the courses must provide Asensio data and pay him so he can compile a report for a marketplace. Asensio can't be hired by one course to provide it with specific data from three of its competitors. He won't work on the sly.

If five courses participate in a market-share analysis, Asensio provides each with specifics of their own operations — from comparisons of rounds and revenues on weekdays and weekends to green fees and golf car rentals. And to the individual courses, he will also provide aggregate numbers on their competition. Nobody gets the lowdown on anybody else. "I'm working as a neutral party for all of the courses," Asensio says.

Still, individual courses get a good idea of where they stand with their competition. Then they can take the appropriate measures to improve their market share in the needed areas.

When Asensio debuted GolfTrak in the fall of last year, he charged \$160 a month. He soon realized the fee was too expensive, and he recently slashed the price to \$50 a month.

"It's a no-brainer for that price," Asensio says. "If you don't want to know your market share for \$50, then you ought to be fired for violating your fiduciary duties as a golf course operator."

Asensio says operators should be concerned with their capacity utilization or the maximum number of rounds a course can sell in a day. "In the hotel world, capacity utilization is equivalent to occupancy," he adds.

Asensio insists that skeptics will realize the benefit of Golf Trak once they try it. But he says it will take about four years to become popular.

You can't argue with Asensio regarding Golf-Trak's benefits — if it delivers what he promises. For \$50 a month, operators can learn a lot about themselves. It's about dollars and sense.

Larry Aylward, managing editor of Golfdom, can be reached at 440-891-2770 or laylward@advanstar.com.

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Despite its battle with gray leaf spot, experts say perennial ryegrass has come a long way. "It's still a great surface – shiny and bright and easy to establish and grow," says agronomic consultant Terry Buchen.

A Close Eye on Rye

The future of perennial ryegrass may hinge on its resistance to deadly gray leaf spot t has been a Dr. Jekyll-and-Mr. Hyde existence for perennial ryegrass the past few years. Some experts wonder if perennial ryegrass will go the way of the Dutch elm in some U.S. regions while its popularity soars in others.

The menace in what was otherwise an idyllic world for ryegrass is gray leaf spot, a disease which appears during high heat and humidity in the midst of drought. Gray leaf spot jumped from grain crops to ryegrass in 1972 when an epidemic was diagnosed in Mississippi and Louisiana. With the exception of one case reported in Maryland in 1985 and another by Penn State University professor Peter Landschoot in 1992, it remained relatively silent until a horrendous summer in 1995 caused severe outbreaks in Maryland, Pennsylvania, Virginia, New Jersey and Kentucky. There was no fungicide at that time to fight the disease.

Nevertheless, those outbreaks were mere precursors to 1998, when the culprit virtually wiped out ryegrass golf courses, especially fairways, as far north as Rhode Island and Iowa and as far west as Kansas, Oklahoma and Nebraska, according to agronomic consultant Terry Buchen of Williamsburg, Va. The disease also invaded wide swaths of roughs, where it's most evident, says Jim Snow, national director of the USGA Green Section.

Blindsided by the 1998 epidemic, many superintendents panicked and began converting their courses to other grasses. In the transition zone, where courses were hurt the most, superintendents are using bentgrass, zoysiagrass or bermudagrass to replace ryegrass. In the cool-season zone, the choice is bent-*Continued on page 50*

Eye on Rye

Continued from page 49

grass. In both zones, some are using Kentucky bluegrass.

As National Turfgrass Evaluation Program national director Kevin Morris underscores: "We can always use more disease resistance with ryegrasses, especially against brown patch and gray leaf spot. My guess is we're not there with gray leaf spot."

The disease is even a problem in the fall when superintendents seed in October and November, Morris says.

"Generally, it starts in the rough where the grasses are higher and have more leaf area, and then moves to the fairways," he says. "So a lot of guys are spraying their roughs."

The epidemics were all the more devastating because of the promise shown in perennial ryegrass breeding. Giant leaps had been taken toward near perfection.

"I'm amazed by the improvement in this last four-year period," says William Meyer, director of the turfgrass breeding program at Rutgers University, where nine of the top 10 germplasms in the NTEP ratings originated. "The new ryes made a two-rating jump — from five to seven on a scale of nine. Superintendents want to mow rye tight and have it wear-tolerant, and these ryes are just beautiful."

Morris says perennial ryegrass keeps getting denser and more dark. "I thought we had pushed the limit on that, but the types that once were the darkest and densest are on the back burner now," he adds.

Buchen says perennial ryegrass has come a long way.

"It's still a great surface — shiny and bright and easy to establish and grow," he notes. "You can cut it to almost any height, and it can be used for overseeding on greens and for divots. The color is phenomenal — dark green and terrific for striping because one side of the leaf is more shiny than the other."

But even Buchen admits gray leaf

Improved Speed Consistency And Overall Playability

Aggressive management practices can compromise the health, quality and playability of traditional bermudagrass varieties. Tifdwarf, Tifgreen, and even some of the new superdwarf varieties become stressed when subjected to reduced mowing height, frequent verticutting, increased topdressing and minimal irrigation. TifEagle, on the other hand, was created to withstand just this kind of abuse. In test after test, TifEagle's quality rated superior to Tifdwarf and other warm-season grasses. Improve the speed, consistency and playability of your greens. Insist on TifEagle.



spot setback is a bad sign for the the state of perennial ryegrass.

Dealing with it

Buchen hopes gray leaf spot outbreaks don't cause superintendents in the transition and cool-season zones to abandon ryegrass en masse because the disease can now be controlled — at a cost.

"There aren't many fungicides that work on gray leaf spot, so it gets pricey," Morris says. "Just think about [the immensity of] spraying all your roughs. But if you want to control it, you have to control it in the roughs."

On fairways alone, Buchen adds, preventative applications of fungicide will cost between \$20,000 and \$40,000 a season per golf course.

"Bentgrass uses a lot of fungicides, too, but not to this extent," he says. "So superintendents will have to bite the bullet and spend the money on fungicides or spend the money to convert."

Yet one of the constant costs of perennial ryegrass is that it only lives about four years in the transition zone. Once a stand is three or four years old, it needs to be reseeded every year, even if it's the predominant grass, Buchen says.

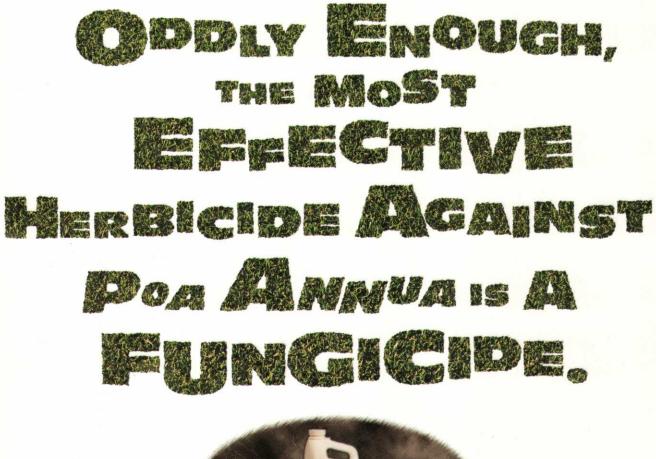
"It just can't handle the heat," he notes. "Up north, you have to reseed rye every second or third year."

Meyer, meanwhile, hopes breeders can produce a gray leaf spot-resistant ryegrass into the marketplace in two to three years.

"We planted a trial for NTEP between 12-foot plastic walls that we will heat up and see what happens," he says. "We're screening all the germplasm we can find. We have a range of reactions (and some) indicate resistance."

Different story in the South

The counterpoint to the rethinking going on in the transition and cool-season zones is in the South, where ryegrass is more popular than ever. The oddity is that gray leaf spot has never struck ryegrass in Florida because rye is used there to overseed in the winter months when it's not hot and humid.



More and more golf course superintendents are reaching for Rubigan* fungicide to control Poa annua in overseeded bermudagrass. Why? Simple. It works. When used at the recommended rates, Rubigan provides 75-95% control of Poa annua in overseeded areas such as greens, tees, collars, slopes and approaches, That's better than any herbicide...better, in fact, than any other product on the market. Better yet, Rubigan provides this level of control without harming turf or impeding the germination of desirable grasses.

So how does Rubigan do it? It eliminates Poa plants as they germinate, much like a preemergence herbicide. And don't forget: since Rubigan is a locally systemic fungicide, it controls tough turf diseases like spring dead spot, dollar spot, large brown patch, the Fusarium blight complex, copper spot and red thread.

If all of this isn't enough to convince you to try Rubigan, contact your Dow AgroSciences representative or your distributor. They will be happy to give you a few more reasons. But don't just take our word for it. Turn the page to see what a superintendent like yourself has to say about Rubigan. Many factors can spoil turf appearance, but an outbreak of *Poa annua* doesn't have to be one of them.

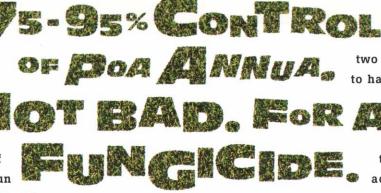
members happy.

Just ask Jeff Huelsman, golf course superintendent at Sun City Center near Tampa, Florida. He's the man responsible for keeping Sun City's four courses looking great. And, for keeping its 1200



"We'd been using Rubigan for *Poa* control, but switched to a competitive product because it seemed to be more economical," says Huelsman. "Of course, when the product fails to control the problem, we aren't saving a dime."

Huelsman depends on the chemicals



he uses to do what they say they will do-work. That's why he returned to Rubigan* fungicide for treatment of *Poa* on his golf courses. It's the only product on the market guaranteed to control *Poa annua*. Yet it's surprisingly gentle on established turfgrass.

"This is what the other product did to our greens," Huelsman says as he points to a strip of brown grass. "This isn't something you want your members to see. But using Rubigan eliminates the problem while keeping the course looking great."

Rubigan is also simple to use. Its liquid formulation makes for easy handling and tank mix flexibility, saving you time and manpower... two things you never seem to have enough of. In addition, unlike herbicides such as Kerb, you won't have to neutralize Rubigan with activated charcoal. This

means additional time and cost savings, as well as better looking greens and tees.

The fact is, when it comes to complete, season long control of *Poa annua*, Rubigan is the best product money can buy. Something Jeff Huelsman learned the hard way.



"The success we've had with Rubigan is unmatched by anything else we've tried," says Huelsman. "It's by far the best product out there for preventing *Poa annua*. We'll never switch again."

RUBIGAN FUNGICIDE POA CONTROL PROGRAMS									
	Number of Applications	Rate of Application	Spray Interval (Days)	Application Timing	Expected Control %	Expected Duration			
PROGRAM 1 (preferred option) Ideal for overseeded bermudagrass turf.	3	4.0 fl.oz. per 1,000 sq.ft.	14	First application before <i>Poa annua</i> germination; final application 14 days before overseeding.	75-95+	90 days			
PROGRAM 2 Ideal for overseeded bermudagrass turf.	2	6.0 fl.oz. per 1,000 sq.ft.	14	First application before <i>Poa annua</i> germination; second application 14 days before overseeding.	75-95+	90 days			

NOTE: A single application of 2.0 fl. oz. of Rubigan A.S. per 1,000 sq. ft. in January or February following overseeding will help enhance the suppression of *Poa* annua and prolong this effect through the spring season. Also, in the case of bentgrass, fine fescues and Poa triviallis, final application should be made 30 days prior to overseeding.

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