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IATROLS

The Lyon King



Continued from page 40

taken steps to ensure his doesn't become an empty promise.

One such step is a partnering agreement which he asks his employees to sign each year at an annual meeting, verifying that they understand the partnering concept and commit to practicing it. In order to promote a sense of unity, Lyon organizes an annual golf tournament/picnic for employees and their families, as well as monthly staff lunches. "As a staff, we try to play each course once per season," he adds.

Nutrient Management Plans



We write nutrient management plans (NMPs) that describe management and conservation actions that will be followed to meet clearly defined soil and water conservation and pollution prevention goals.

Our plans fulfill requirements by local and state water quality agencies for golf course construction projects.

CIRCLE NO. 121

"A good example of the partnering concept is how we share equipment and personnel," says Jarrett Crowley, a technician at Meadow Hills GC. "Meadow Hills has a lot of trees, whereas Murphy Creek does not. There's nothing fancy about the Homestead at Murphy Creek – and that's the way CGCS Dennis Lyon likes it.

Right now, I'm borrowing two mulching mowers from Murphy Creek to help with the work at Meadow Hills. Sometimes we'll borrow employees from Murphy Creek if we're short on people,

or Dennis will come out and spend some time here to help us out."

In taking the partnering concept from theory to practice, Lyon is fulfilling something else he considers important — being a leader.

"The success of any organization depends upon leadership," he says. "I try to provide a leadership style that includes partnership and resolving issues before they become crises."

If there is a problem, Lyon doesn't ask that his employees look to him for the answer. He believes they're capable of finding their own solutions.

"We try to deal with problems at the level of the organization to which they're closest," he says. "We set standards and turn the employees loose on how they attain them."



How do you get more power to the root of your weed problem?





The proof is in the leaf.'

Monsanto scientists used scanningelectron microscopy to photograph the effects of weeds sprayed with Roundup Pro and an imitator. Taken just one hour after application, these images clearly show more formulation in the leaf sprayed with Roundup Pro.

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In the first two hours, it delivers three times more power to the roots than Glypro Plus herbicide.





The proof is in the roots.²

Scientists also used autoradiography to photograph and measure the amount of herbicide in the roots two hours after application. Time after time, at least three times more herbicide showed up in the weeds sprayed with Roundup Pro. With the imitator, barely any herbicide has moved to the roots. This is a cross-section of a weed leaf magnified 1000x. The yellow droplets mean Roundup Pro is already at work inside.

ound YD

Scientific photography taken two hours after application shows three times more Roundup Pro in the roots. More color means more herbicide. This weed, sprayed with the imitator, has almost no droplets in the leaf.

Glypro Plus

In the first two hours, almost no imitator herbicide has moved to the roots.

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Call **1-800-ROUNDUP** and ask for your free Roundup Pro video today!

Always read and follow label directions. Test conducted with MON 77360, EPA Reg #524-475 with comparison to Dow product carrying EPA Reg, # 62719-322. 1.Test methodology: In scanning-electron microscopy Monsanto scientistis identified penetrated formulations of both Roundup Pro and Glypro Plus in the mesophyll cell layer. These micrographs support the evidence that formulations containing Monsanto's patented PROformance technology rapidly penetrate the leaf surface. 2.Test methodology: Radiolabeled formulations were applied at equal acid-equivalent rates. Radioactivity was visualized by autoradiography following a simulated rain event two hours after application. Monsanto laboratory tests, 2000. Glypro Plus is a trademark of Dow AgroSciences LLC. Roundup?, Roundup Pro' and PROformance™ are trademarks of Monsanto Company. [10613 jct 1/01] ©2001 Monsanto Company, RUPRO-10613 No one knows Lyon's open-minded approach to attaining goals more than Dean Lindsey, superintendent of Murphy Creek.

"Dennis is like a good parent. When you go to him with a question or idea and he thinks it's good, he'll go with it,"

Lindsey says. "If he thinks there's a better way, he won't tell you to do it that way, but he'll ask you to at least try it. He never says, 'This is my way, and this is the way we're going to do it.' "

One example of employees doing things their own way comes from a conversation Lyon had with his assistant superintendent.

"I asked him what his mowing schedule was, and he said he didn't know," Lyon says. "He said when the fairways need to be mowed, he mows them — whether it's seven days a week or five.

One gets the feeling, however, that Lyon has learned a thing or two about solving problems after what he calls "25 years of making mistakes." As one of the vice presidents of the Colorado Golf Association, he's keen on listening and learning from his peers.

"I'm a student of management," Lyon admits. "I'm always looking for new ideas. I listen to my peers in this business and my employees because they're great at telling me when I mess up and what I do well."

Crowley confirms Lyon's listening skills, admitting that he has more than once given Lyon an earful.

"If there's a problem at our course, [Lyon will] schedule a

meeting," Crowley says. "He sorts through all the bull and uses all the relevant information."

It seems that Lyon and his staff succeed more often than they mess up. An example of their most recent success is Murphy Creek, the centerpiece of an \$8 million, 1,100-acre residential

development project. Aesthetically, the 7,456-yard, par 72 prairie links course designed by Arizona architect Ken Kavanaugh can only be called magnificent — a 1920s farm theme is achieved by numerous rusted pieces of farm equipment dotting the course, not to mention hitching posts with buckets for club washing, wooden bunker rakes and weathered signage.

Diehard players rejoice in the challenge of the layout — 80 ragged-edge bunkers and 5-inch Canadian blue fescue give the course a European feel. After experiencing tees, fairways and greens of a quality normally found at private courses, golfers are left dumbfounded at the reasonable greens fees: \$28 during the week (\$24 for residents of Aurora) and \$34 on weekends.

Lyon says the success of Murphy Creek

and the rest of Aurora's courses is the result of commitment. "We have a commitment by our city government to have

good golf courses," he says. "They've allowed me to generate resources to do that, and there's also a commitment by our employees to provide excellent facilities."

Stahl is managing editor of Landscape Management and Athletic Turf, Golfdom's sister publications.



The Need for a Creed

Certified superintendent Dennis Lyon, manager of golf for the City of Aurora, Colo., takes the game seriously. He and other Colorado public golf course operators met in October 1999 to discuss how to improve golfer etiquette, which they believe has declined over the past several years. They devised a Golfer's Creed, or list of things

golfers should promise to do to respect golf and its players. Lyon is the keeper of the creed and has a framed copy visible at each one of Aurora's seven municipal golf courses. It states:

Golf has been good to me. As a golfer, I will RESPECT and be good to the game of golf:

Responsibility – I will follow the rules of the golf course and take responsibility for all of my actions on the course, including the safe operation of a golf car and the responsible consumption of alcoholic beverages.

Etiquette – I will abide by the rules of etiquette, awaiting the proper time to hit, refraining from foul language and boisterous behavior, and generally conducting myself as a lady or gentleman on the course.

Sensitivity - I will be sensitive to the environment and the course where I play and to those who maintain and manage it.

Pace – I will keep up with the group ahead and maintain an appropriate pace of play.

Educate - I will do my best to educate other golfers on the principles of this creed by sharing it and living up to it at every opportunity.

Conditions – I will strive to leave the course in better condition than I find it, by fixing my ball marks (and those of others), replacing my divots, raking bunkers, and properly disposing of trash.

Traditions – I will embrace the rules and traditions of this ancient and honorable game and respect my fellow golfers and the courses we are privileged to play.



The Homestead at Murphy Creek has a rustic touch, which was architect Ken Kavanaugh's intention.

About The right adjuvant mixed with the right herbicide can lead to optimum weed control in post-emergent applications. But how many superintendents know that?

BY LARRY AYLWARD, EDITOR

ord on the golf course is that many superintendents don't realize how adjuvants can improve post-emergent herbicide applications. The right adjuvant selection, combined with your next pesticide application, could significantly improve results. What superintendent wouldn't want that? Adjuvants are additives that can be mixed with pesticides to improve performance by adding or modifying the pesticide or altering the physical characteristics of the spray solutions. The modifications include improved retention, stick, penetration, spread or altering deposit dry time to improve uptake, according to Jim Reiss, director of marketing for Precision Laboratories in Northbrook, Ill. The term adjuvants comprises a range of chemistries, including buffers, spreader stickers, defoamers, crop oil concentrates, modified vegetable oils, nonionic surfactants and fertilizers.

"The proper adjuvant selection could dramatically influence the performance of a post-emergent herbicide," Reiss says. "But most superintendents have limited knowledge about them." Superintendents that have knowledge of adjuvants have had success using them. Terry Kennelly, superintendent of DelRay Dunes Golf & CC in Boynton Beach, Fla., says the ammonium sulfate-based adjuvant he mixes with an herbicide improves uptake of the pesticide. It prevents hard water ions from tying up the herbi-

> cide, and improves absorption and translocation across cell membranes of certain weed species. "The adjuvant cuts through the cuticle of the plant and helps the herbicide get into the plant quicker," Kennelly adds. In southern Florida, where the threat of rain is imminent daily, the *Continued on page 47*

> > An adjuvant cuts through turf cuticles and helps an herbicide permeate the grass quicker. The end result is better-looking and more healthy turf.



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Post-Emergent Herbicides

Continued from page 44

adjuvant plays an important role in post-emergent herbicide applications, Kennelly says.

"I'd hate to have a worker spot spraying all day and then have a thunderstorm come through and wash the herbicide away," Kennelly says. "That's when the adjuvant comes into play."

Bart Fox, a senior sales specialist for BASF, says it's usually the more experienced superintendents who use adjuvants. Veteran Doug Hausman, superintendent of Dakota Dunes CC in Dakota Dunes, S.D., fits that bill. He's been using an adjuvant with postemergent herbicide applications for several years. "[The adjuvant] is the key ingredient for getting quick burndown and great post activity," he says.

Hausman admits he's always been conservative about what

What They Do

Adjuvants' functions: Chelating, sequestering antagonistic ions

Buffering

- Emulsifying
- Improving retention
- Wetting
- Spreading
- Altering deposit dry time
- Sticking
- Penetrating
- Transportation

For more information on adjuvants, contact: www.precisionlab.com/agriculture/index

SOURCE: PRECISION LABORATORIES

he puts in a spray tank. "Sometimes A plus B equals D, as in disaster," he says. But Hausman now knows enough about adjuvants that he has faith in them.

"We're always fiddling with rates and trying to go with the lowest end possible according to the label," he says. "You can do that with adjuvants."

How can more superintendents learn about adjuvants like Hausman did? Herbicide labels often discuss general adjuvant technology. "But there's a range

of chemistries and huge differences between them," Reiss says.

Superintendents must know exactly what adjuvants to use with certain products, Reiss says. A wrong combination could damage turf. Adjuvants perform different functions. "Today's pesticide technologies have specific needs in specific situations, and it takes specific adjuvant technology to optimize their performance," says Reiss, noting that environmental conditions, application technique and leaf surface barriers are also factors that contribute to performance.

Kyle Miller, a senior technical specialist for BASF, says various herbicide distributors pitch myriad adjuvants with different formulations, which can confuse superintendents. Rick Wohlner, president of Precision Laboratories, says some salespeople and distributors who sell adjuvants need to brush up on the technology.

Superintendents also need to ask more questions about adjuvants, Reiss says. "If a supplier says he has an adjuvant that replaces crop oils, spreaders, stickers and nonionics, a superintendent should say, 'Let me see some data,' " Reiss says.

Hausman's advice is to take matters into your own hands. Try the herbicide and adjuvant combination on an area of your course that can afford to be damaged if the experiment goes awry. "Be conservative until you develop your own comfort factor with an adjuvant, no matter what anybody tells you," he says. ■

The Poop on Post-Emergent Herbicides

We asked superintendents and industry experts to give us their takes on post-emergent herbicides. Here's what they had to say:

Kyle Miller, a senior technical specialist for BASF

Even if you're waging a never-ending war against a noxious weed, you're better off than you were 10 years ago, says Miller, adding that superintendents have plenty of products to choose from for post-emergent control.

"There are so many new options," he says. "Superintendents can use these herbicides to control the tough stuff, like Virginia buttonweed, wild violet and ground ivy."

Doug Hausman, certified superintendent of Dakota Dunes CC

Hausman says he prefers post-emergent herbicide applications and could do without pre-emergents.

"I don't like pre-emergent applications, particularly on bentgrass fairways and tees," Hausman says. "I think they're root pruners. My preference is to go post. That way, you're never treating more than you have to."

But Hausman was forced to change his philosophy when members saw crabgrass on tees and complained about it. Hausman realized that it's difficult for his maintenance crew to constantly scout for crabgrass and treat it. "Obviously, we weren't doing a good job," he says.

So Hausman is using a pre-emergent herbicide on select holes this spring at his in Dakota Dunes, S.D., course.

"We're going to try both," Hausman concedes. "We just can't always be out there to take care of business on a post basis."

Terry Kennelly, superintendent of DelRay Dunes Golf & CC

Overall, Kennelly is happy with the results he sees from post-emergent herbicide applications at his course in Boynton Beach, Fla.

"But I've had one noxious weed that I'm having trouble controlling – tropical signal grass," he says. "It's harder than hell to get rid of."

But Kennelly is not giving in. His recipe for eradication is to spray the weed every 10 days while the bermudagrass is still active.

"Making repeat applications is the best way to go at it," he says. "You have to start a program and commit to it."

Tom Alex, director of golf course maintenance for Grand Cypress GC Alex wishes for a post-emergent herbicide to control *Poa annua* on his overseeded fairways at his Orlando, Fla., course.

"We're getting extremely high populations of *Poa* after we overseed," he says. "It's a perennial problem."

Alex has tried a pre-emergent herbicide 30 days before overseeding, but with no luck. He's tried to rid the *Poa* after overseeding. "But that's dicey, and this year I frosted some fairways," he says.

The only way to correct the situation is not to overseed one winter and apply an herbicide to eradicate the *Poa*, Alex says. "This is a huge issue [with golf courses] around here," Alex says.

Joe DiPaola, golf market manager, Syngenta

In his discussions with superintendents, DiPaola says post-emergent herbicides are not at the top of their list of concerns.

"I haven't heard any complaints," he says. "They don't have the *perfect* tool, but superintendents [still] have a fair array of tools."

Tim Cunningham, superintendent, The Country Clubs of Fox Meadow Cunningham says his biggest problem is with chickweed and clover in fairways. His regular herbicide program allows for low-dose rates in the spring and fall, and really low-dose rates in the summer.

"In the summer, we back down because of the burn potential," Cunningham says. "When I was a bit too aggressive three years ago, I got burned." **Dave's World**

ast month, my least favorite television golf commentator and fashion icon himself, Johnny Miller, remarked that a poorly dressed golfer "looked like a greenskeeper." The astute Miller

is to be commended for his eagle eye, even if his mouth continues to provoke the mute button on my television remote. But his comment made me realize that you *can* spot turfgrass people from a distance.

When a gathering of turfgrass stars happens, anyone observing with a distant spyglass can see that a special cult has assembled. If you're not sure what I'm talking about, close your eyes and think about the last superintendent meeting, trade show or educational event you attended.

Now, think of the faces you saw. I don't care if it's the middle of the worst winter ever, the turfgrass cult member always has a tanned face. Other workers can't keep a 365-day-a-year Coppertone tan like a true turfhead can. For those of you who immediately think of skin cancer when you think of the sun, may you be delivered a crisp tube of SPF-500 for your paranoia.

Now, with your eyes still closed, think of the logo. You'll remember that somewhere on some piece of a turfhead's clothing is a logo, perhaps from the home base of his or her operation.

However, it's also cool to wear a logo from a course or club that you have visited. Extra points are given for Augusta National. Credit is also awarded to those turfheads who have good stories to go with their logos, but golf stories don't qualify.

A turfhead's story usually sounds like this: "That maintenance facility was like the Taj MaShop, man. They had at least nine of everything." On the other hand, nobody wants to hear a golf story. We want I-was-there-and-Isaw-their-pump-station stories.

Double extra credit goes to those who sport a logo of a place that no one has ever heard of or will. Your adventure to Papua, New Guinea, to play skins makes for a great story and will surely clog trade show aisles with the bodies of enraptured turfheads.

Are your eyes still closed? If they are, now I want you to think the clothes turfheads were wearing. You'll probably agree that the power

It's a Bird, It's a Plane, It's a ...

BY DAVE WILBER



WITH HIS TAN, HIS WIND SHIRT AND HIS NEW HAT, YOU CAN EASILY SPOT A TURFHEAD FROM A DISTANCE suit of today's turfhead is the wind shirt. You should be ashamed if you do not own one for every day of the week.

The wind shirt. Say it with me. What a cool thing to roll across the tongue. Our fathers and grandfathers had the sans-a-belt slacks. But we have the wind shirt, and we're better for it.

If you're like me, there's no doubt you've been scolded by your spouse for daring to wear a wind shirt out to dinner or a family event. But, hey, as the saying goes: Clothes make the professional.

While you're thinking of clothes, you'll probably recall the many hats you saw ("Hey Whitey! Where's your hat?" I had to slip that line in from *Caddyshack*.) The general shape and color of the sweat stains on the turfgrass professional's cap is a sign of distinction. In no other circle of life do there exist so many people with so many different hats, yet at every trade show, the turfheads covet the newly scammed hat as the best treasure. You receive extra points and money for your children's therapy bills if you like bucket hats and wear one away from the golf course environment.

Footwear has its own mark of distinction. Our shoes come in two basic acceptable models. One style, of course, is the spikeless golf shoe. Style points go to those who don't polish the shoes — ever.

The second style is a boot with some kind of Goretex or form of rubber coating and gum soles. No one on the planet makes better use out of this kind of footwear than turfheads. Boots are tools, I always say, but no one understands.

We stick out in crowds, and you should be proud. I, for one, am proud of my wind shirt collection.

Dave Wilber is a Sacramento, Calif.-based independent agronomist who will also be happy to appraise the value of your hat collection. He can be reached at dave@soil.com.



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Insidious Insects

Experts fearlessly forecast which insects will be on the Most Wanted list

By Frank H. Andorka Jr. Associate Editor

hen I reach Dave Shetlar, professor of entomology at The Ohio State University, he's in Florida on spring break doing what he loves most chasing bugs.

"I'll have to call you back," he says. "I'm about to capture a good sample of mole crickets."

When he finally does take a break from digging for insects and returns the call, he says he's reluctant to forecast which insects will bug superintendents this year. But Shetlar knows superintendents would rather be proactive than reactive, so he and other experts agree to predict which creepy crawlers might cause the most headaches for superintendents this year:

White grubs – Superintendents in areas with a wetter-than-normal spring should watch for white grub activity, says Shetlar, who expects levels for white grubs to be up slightly.

Ron Ross, superintendent of Quarry Oaks GC in Ashland, Neb., believes Shetlar's prediction and says his course is suffering from grubs. An extreme drought last year combined with a mild, short winter to make it difficult for him to control them.

"Our mild winter didn't kill many of the first stage grubs, and the weather forced us to put on our insecticide treatment later than we wanted," Ross says. "Everything worked against us this spring, and we're paying the price now."

Fire ants – Pat Gross, agronomist for the USGA's Green Section in Santa Ana, Calif., says fire ants are a perennial problem his office monitors. He advises superintendents to watch their sprinkler systems closely for the telltale mounds because fire ants like to build colonies near electrical currents.

"Superintendents need to control fire ants as a matter of golfer and maintenance crew safety," Gross says. "They can be a problem, but if you notice them early enough, they're not a 911 emergency."

"Fire ants are a perennial problem in the South and in the West," Shetlar says. "You have to be on the lookout for the little mounds they create around trees because they will attack unsuspecting golfers. They are nasty." DYNAMIC GRAPHICS