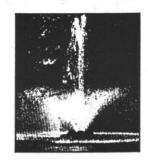
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HOLE NOTES

OFFICIAL PUBLICATION OF THE MINNESOTA GOLF COURSE SUPERINTENDENTS' ASSOCIATION

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FROM THE PRESIDENT'S DESK

DOUG MAHAL

You'll note by our masthead that the Association is 60 years old this year. MGCSA has enjoyed a rich heritage with the of some extremely individuals, not the least of which was Harold Stodola. Harold who passed away a year ago April 20 really helped direct the course of today's superintendent and his current professional status. Gentlemen like Harold might enjoy this little bit of history: In the early years of golf course maintenance, cutting of the greens was often referred to as "shaving". Subsequently came the once commonly used derivation "little shavers" to mean the greenkeepers' young children.

May is the month that some of the more routine maintenance begins on our golf courses. Turf begins to grow reliably and requires that daily attention that our memberships have grown accustomed to. At the same time, May is too early to get many of our seasonal staff members to help us with the work. It's a busy time but let's not forget what's coming up on May 10.

As usual, our April monthly meeting was well attended, particularily when a game of golf is possible on a well maintained golf track like Faribault Golf and Country A special thanks to superintendent Dale Wysocki and the rest of the staff at Faribault for a wonderful We added a new feature to our monthly golf meetings, a long drive and closest-to-the-pin contest. We'll be giving away a dozen golf balls for the winner of each. Winners in April were: Long Drive - Dave Swanson of S&S Tree Closest-to-the-pin Harold Specialists. Batzer, a landscape pest consultant. Faribault had a large number of evergreens in the rough areas, many of which I was able to observe up close and personal while searching for errant tee shots.

Most of us that do play the game are

really looking forward to this month's meeting at Somerset Country Club on May 12. For those of you who have never played there, you're in for a real treat. Somerset has one of the great golf tracks in the region and I for one am pleased to have the opportunity to play it for a second time. I am sure Mr. Gerlad Murphy will have things in great shape for us both on the course and at the dinner table.

Looking ahead, plan now to attend our annual picnic at Tartan Park. Mike Leitner is spearheading a big effort to make this year's event well worth attending. It promises to be like no other MGCSA summer picnic you have ever attended in the past, including the family!

I hope we get a little more "free" irrigation in May than we experienced in April. Natural rain water has a quality that grass plants definitely recognize.

SIMPLE QUESTIONS MAKE FERTILITY A PRIORITY

"It's not necessarily doing things right."
It's doing the right things right."
That's the message from many professional consultants and management trainers when they speak to groups. The key to success as a modern manager is setting priorities, they say.

Turf managers face the same challenge. Those that succeed know the priority of fertility management as part of their management responsibilities.

Less than 10 percent of a turfgrass management budget is allocated to fertility, and often less than 5," estimates Dr. D. B. Pfleiderer, general manager, Lebanon West, Lebanon Chemical Corp. "This small investment, however, can affect 50 percent of the outcome. An operator can maximize the quality of turfgrass with a minimal investment in fertilizer."

That kind of return on investment makes fertility management a priority for

today's successful turf professional.

Two critical aspects of fertility management are simple questions: "How much?" and "When?" - the same questions fertilizer salespeople ask each time they take an order.

For turf operators, however, these questions require a little more thought. The answers are not always simple.

To determine how much fertilizer is needed, the first step is fertility testing. "The objective is to supply plant nutrients that are deficient in the soil," says Pfleiderer. "The best way to do that is with soil and plant analysis."

Soil testing is a simple but often neglected practice. Standard procedures involve taking at least six one-inch diameter soil cores from an area that is uniform in soil type, topography, previous fertility treatment, drainage and other cultural factors. Separate samples should be taken where these characteristics are different.

A better measurement of the amount of nutrients available to the plant comes from plant tissue samples, which can be analyzed using a mass spectrograph, according to Pfleiderer.

He stresses that balance of important primary nutrients like nitrogen (N), phosphorus (P) and potassium (K) is the key in prescribing fertilizers and rates for turfgrasses.

Nitrogen sources should be a combination of slow- and fast-release products, which provides the safety margin needed to prevent turf burn and produces good color without causing excessive growth.

Pfleiderer says phosphorus is particularly important in establishing turf. "It stimulates early root formation, encourages vigorous beginning growth and provides winter hardiness," he explains. Potassium also increases plant vigor, which promotes disease resistance and aids in forming and moving starches and proteins, he adds.

Operators should request fertility recommendations for more than just P and

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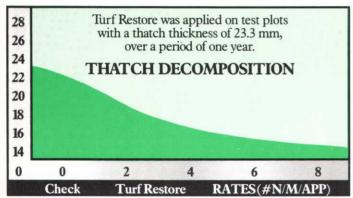
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TURF RESTORE EFFECT ON THATCH DECOMPOSITION.



CONCLUSION: Application of Ringer's Turf Restore at rates utilized in the thatch decomposition study DID, in fact, DECREASE THATCH THICKNESS from a mean thickness of 23.3 mm to 15.4 mm in one year.

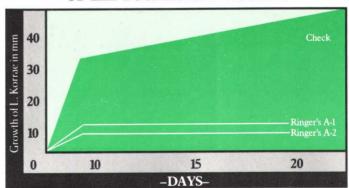
TURF RESTORE EFFECT ON FUSARIUM BLIGHT PATCH DISEASE

	REDUCTION IN SPOTS					Control		
MAY (5/23) # SPOTS	19	19	22	15	15	22	26	12
NOV. (1986) # SPOTS	1	0	3	0	1	0	0	9

CONCLUSION: TURF RESTORE ACHIEVED 100% DISEASE REDUCTION

Turf Restore is a slow-release, long-lasting fertilizer with the same nitrogen response as sulfer-coated urea.

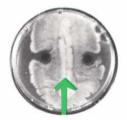
INHIBITOR EFFECT OF RINGER ORGANISM ISOLATES ON THE GROWTH OF LEPTOSPHAERIA KORRAE



RESULTS: RINGER ORGANISMS A-1 AND A-2 BOTH WERE INHIBITORY TO THE GROWTH OF LEPTOSPHAERIA KORRAE.



Check Leptosphaeria Korrae Isolate Fusarium Organism



Ringer Organism Inhibitor Effect on Leptosphaeria Korrae

Tests conducted at Michigan State University by Dr. J. M. Vargas, Professor of Botany and Plant Pathology, and Dr. Paul Rieke, Professor of Crop and Soil Sciences.

Analysis 10-3-4 125 million micro-organisms per gram.

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MEDALIST TURF PRODUCT	MAJOR AREAS OF USE	SPECIAL FEATURES
Athletic Pro and Athletic Pro II	For athletic turf.	Well suited for new seeding or overseeding. Fast establishing, traffic tolerant, rapid recovery. Both provide good footing.
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Landscape Pro Mix	School grounds, cemeteries, golf course roughs, home lawns.	Establishes fast. Adapts to broad range of conditions and management levels. Low to moderate fertility needs.
Overseeder II Mix	Fairways, tees, athletic fields.	Rapid germination and establishment. Withstands heavy traffic and resists diseases. Penetrates compacted soils.
Medalist North Mix	Fairways, tees, cart paths, wear areas.	Quality turf for high traffic areas. Clean mowing and disease resistant.
Premium Sod Blend	Commercial sod production.	Exceptional dark green color. Tolerates light shade. Superior disease resistance. Rapid sod producer.
Renovator Pro Mix	Problem solver for heavy traffic areas (athletic fields, golf tees, and fairways).	Penetrates compacted soils and combats <i>Poa annua</i> . Adaptable to most geographic regions.
Medalist Brand Overseeding Products	Winter overseeding of dormant bermudagrass.	Establishes rapidly and evenly. Tolerates traffic while providing a superior putting surface. Smooth spring transition.

Ask your Northrup King distributor about Medalist Turf Products to solve your turf problems. Or write Northrup King Medalist Turf Products, P.O. Box 959, Minneapolis, MN 55440. K, Pfleiderer advises. "Although turfgrasses require mostly N, P and K, there may be shortages of secondary and micronutrients."

He lists these nutrients and their benefits:

SULFUR..for color and growth; balances N for color and vigor; normally needed in high-volume watering conditions.

MAGNESIUM..balances the high K levels needed for vigorous, healthy turf; regulates uptake of plant foods; part of chlorophyll; necessary for forming sugar; especially for sandy soils.

MANGANESE..balances iron in high pH soils, particularly irrigated soils; accelerates growth process.

CALCIUM...creates good growth environment; promotes root growth and root hair formation; normally sufficient if pH is in the proper range.

IRON. . affects color.

"When?" The second key question 19 Research has shown that timing fertilizer application affects plant Temperature is more important response. calendar dates. according Pfleiderer. Spring and summer, which are the traditional seasons for application, may not be the optimal times, particularly for cool-season grasses like bluegrasses.

Pfleiderer reports recent research that indicates fall fertilization can provide many benefits for cool-season turf, including 1) increased shoot density, 2) better root growth, 3) less need for springtime mowing, 4) reduced week problems, 5) improved color, 6) more tolerance to drought, and 7) less summer disease.

Heavy fertilization (one application in early fall, then a second, five to six weeks later), followed with a light treatment in spring (enough to green up the turf) and little or no summer feeding appears to be best for cool season grasses, he reports.

CREDIT: GROUND RULES, February 1987



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Now add the fact that many golfers are notoriously critical of course condition and you see why superintendents have so many anxieties. The close cutting and some other management procedures so necessary to the enjoyment of the game are not always agronomically sound cultural practices.

This is why the tender care and feeding of golf turf calls for highly scientific adjustment and extensive patience on the part of the golf superintendent. You now have a rough idea of how tough his job has become.

It is not a job for someone who isn't really dedicated.

Remember him the next time you have an exhilarating round. He's dedicated or he would not continue in this work. But we at TURF SUPPLY COMPANY, who supply him with some of the fertilizers and chemicals that make his job a little less impossible, think he rates a well deserved pat on the back.

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EDITOR'S CORNER

TOM FISCHER

With winter making only minimal spontaneous appearances, I guess it could be said that the metro area for the most part went from fall to summer in about one week's time. In the twenty years I have been working on golf courses, the second week in April is the earliest ever that I have had to turn on the irrigation system.

Mother Nature never ceases to amaze me. While Edinburgh USA was under construction we had 18 months of above average rainfall lending us some of the worst possible working conditions. Now that we have established turf and are in desperate need of rain, we can't get a drop.

For those interested and who would like a

new experience on a public golf course, Edinburgh USA will be officially open to the public on May 1. We are a little rough, though, around the edges, but basically the course is ready for play.

A few years ago we asked our members to improve their image by wearing proper attire at our meetings. I would like to commend the membership in complying with this request. This image projects the professionals that we are. As a reminder for the warm weather season, continue to dress properly for our meetings.

Our next meeting is at Somerset Country Club on Tuesday, May 12. Hope to see you there.

Make note of our picnic on Monday, June 15 at Tartan Park. Mike Leitner and our associate members are making arrangements for a very special day for all.



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