It's the Dose

(Continued from Page 20)

water to determine how much volume is used in normal applications. If you're treating a lawn with a hoseconnected sprayer, fill the unit with water and by trial and error determine how fast you need to walk and wave the sprayer to apply the proper quantities.

- (5) Mix and use only the amount of chemical required to treat the smallest area needed. Combining the knowledge you have of the size of the area to be treated, the amount of chemical required by the label and the capacity of your application unit, prepare only the minimum amounts of chemical. "More is better" does not apply to chemical use.
- (6) Thoroughly wash all items used in the chemical application procedure. If you've used a sprayer, partially fill it with water and spray the area you just treated, or other nearby similar areas. Repeat this two or three times. Do not just dump any extra chemicals into the sewer or onto the street. Although it may not be highly toxic, it could have a negative impact on the environment of a nontarget.
- (7) Use common sense whenever you're using chemicals. Window washing solutions and antifreeze are more toxic than yard chemicals a homeowner will use, so all chemicals should be treated with care and respect. Eating or smoking should be totally avoided until you have thoroughly washed with soap and water. If any chemicals are sprayed or splashed on you during their use, remove the garments and wash them separately from other clothing. When using chemicals outside, be sure that any toys (used by children or animals) are removed from the area to be treated so they won't be hit by the spray or drift.
- (8) Be a good neighbor by knowing special sensitivities of people, plants and pets. Paracelsus, the Swiss physician and alchemist who lived during 1493-1541 noted, "What is there that is not a poison? Only the dose makes a substance not a poison."

Chlorine can kill or it can clean. Aspirin can relieve pain or cause death. For a very, very few people, sunlight can cause an allergic reaction that results in death. It's not the substance, but the dose that can harm.

Turfgrass pesticides are effective because they have been developed for use against a specific target. Herbicides kill weeds, fungicides control diseases and insecticides eliminate insects. A herbicide will have no real effect on an insect simply because the chemicals used in herbicides aren't poisonous to bugs.

People, plants and pets may have particular sensitivities to any number of products, including pesticides. Being aware of these sensitivities when using turfgrass chemicals is being a good neighbor. This would include letting your ultra-sensitive neighbor know you'll be spraying a particular product on your property, avoid using herbicides around sensitive plants that could be stunted or killed by accident, or suggesting that your neighbor keep their pets off of your yard to avoid any potential problems.

In answer to those who criticize or question the use of pesticides on lawns, it should be noted that the environmental and aesthetic benefits of lawn are dramatically increased when the grasses are healthy and growing vigorously. While psuedoscientists and scare mongers are able to sensationalize an issue through the manipulation of information, practicing scientists have shown that the benefits of turfgrasses can be substantially increased through the proper use of pesticides and fertilizers, without a significant risk to man or his environment.

Know what the real problem is before you treat an area, use only the proper chemical and only treat when the occurence warrants its use (utilizing IPM practices). Also consider alternative pest control methods.

From Spring 1992 issue of Journal of Environmental Turfgrass

FORGOT & FOUND

A White Tractor Chair was left at the Annual Conference.

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NST Announces Staff Changes

In an effort to serve its customers more efficiently, North Star Turf has announced some personnel changes within its sales staff.

Effective January 1, Joe Churchill assumes the position of sales manager and will direct the selling efforts of the company's sales staff. Before assuming his new position, Churchill worked a sales territory including part of the Twin Cities metro area and southwestern and western Minnesota. Churchill came to North Star Turf in 1990 after 12 years of service with Northrup King's Medalist Turf Division.

Filling Churchill's vacated sales territory is Greg Brodd. Brodd joins the NST sales staff after working two years as the company's service coordinator. His background and recent experience coordinating service work at NST helps qualify him as the company's newest technical sales representative.

These changes come at the same time that NST announces the retirement of Allen Gerdin after 30 years with the company. He will continue to work on a part-time basis during peak season, providing sales support within the company's St. Paul office.

Dr. Ralph Engel Receives 1993 Green Section Award

Dr. Ralph E. Engel, a turfgrass expert, educator, and researcher, has been named recipient of the 1993 Green Section Award of the United States Golf Association.

The award has been presented annually since 1961 in recognition of distinguished service to golf through work with turfgrass.

Active in turfgrass management programs at the university level for nearly 40 years, Engel served on the faculty of Rutgers University in New Jersey. His research work contributed many of the basic principles on which turfgrass management practices are based today.

Dr. Engel was instrumental in the development of misting as an aid in turfgrass survival during high-temperature stress periods. Mist systems have since become a popular tool in greens maintenance programs. In addition, his early work with nitrogen fertilization of bentgrass concluded that the application of smaller nitrogen amounts, applied more frequently, is the best way to manage bentgrass.

Engel's expertise was instrumental in collecting the first turf-type perennial ryegrasses. Some of his selections were used for Manhattan ryegrass, while his discovery of a superior looking Kentucky bluegrass resulted in the release

of the variety Mystic.

The teaching role assumed by Engel may have been nearly as important as his research work. Many of his former students play influential roles in the turfgrass industry today, and more than 125 golf course superintendents in the New Jersey/New York Metropolitan area received their basic turfgrass science training from him.

The author or co-author of hundreds of scientific and popular articles over the years, Engel has lectured at Golf Course Superintendents Association of America (GCSAA) national conferences and regional seminars, as well as many state turfgrass conferences and local association meetings. He also served as a member of the USGA Green Section Committee from 1954 through 1963.

In recognition of his dedication and expertise, Engel has received many honors: the GCSAA Distinguished Service Award, election into the New Jersey Turfgrass Hall of Fame, Professor Emeritus from Rutgers University, and the John Reid Lifetime Achievement Award given by the Metropolitan Golf Course Superintendents.

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1983 Alexander Radko

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1985 Dr. Victor B. Youngner

1986 James B. Moncrief

1987 Sherwood Moore

1988 Dr. Roy Goss

1989 Dr. James B. Beard

1990 Chester Mendenhall

1991 Dr. Joseph Troll

1992 Dr. C. Richard Skogley

1993 Dr. Ralph E. Engel

22 HOLE NOTES

1993

MGCSA Schedule

Mankato Golf Club
Fox Hollow Golf Club
Lafayette ClubJune 14
Research Turf Tourney
White Bear Yacht Club July 19
The Links at Northfork
Stodola Tourney @ Hillcrest Country Club & (TBA) Sept. 13
Eau Claire Country Club Oct. 1
Annual Conference @ Northland InnNov. 17, 18 & 19

MEMBERSHIP REPORT

MARCH 10, 1993 NORTHLAND INN

NEW MEMBERS-MARCH 10, 1993

Dave Munkvold	Duininck Bros. Inc.	Class F
Patrick Kruper	Ruttgers Bay Lake Lodge	A
Scott Odden	Terrace Golf Club	В
Amy Rolando	Weather Watch	F
RECLASSIFICATI	ONS-MARCH 10, 1993	

RECLASSIFICATIONS—MARCH 10, 1993				
Kerry Glader	Precision Turf	A to F		
Jack Kolb	Turf Supply	F to AA		
Gordie Miller	North Star Turf	F to AA		
Jeffrey Youngbauer	Montevideo Country Club	BII to B		
Joseph Check	Check Signature Inc.	AA to F		
Jeff Marlatt	Golden Valley Country Club	BII to B		

John Granholt, Membership Chairman

Reprinting of 15 Years of Green Section Record Is Contemplated

The United States Golf Association, in cooperation with Lewis Publishers, is examining the interest in reprinting the past 15 volumes of the USGA Green Section Record (1976-91) in a seven-volume, full-color, hardcover printing. It will contain all articles exactly as they appeared previously, and it will contain the cumulative index released by the USGA at the end of 1991.

The seven-volume set, if there is enough demand, will be available for approximately \$350. The set will contain over 2,000 pages.

In the future, hardcover copies of issues appearing during the previous two-year period will be made available as part of the series.

The decision to proceed with the reprinting, and the price of the series, will depend on the response received. If interested, please contact: United States Golf Association, Attn: Kathy Paparelli, P.O. Box 708, Far Hills, NJ Telephone (908)07931-0708, 234-2300, FAX (908) 234-1513.

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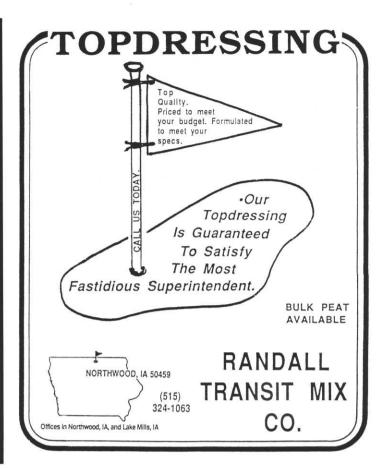
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California GCSA Announces GCSAA S & R

The California Golf Course Superintendents Association (California GCSA) has made a 10-year commitment to membership in the Platinum Tee Club, the premier support organization for the Golf Course Superintendents Association of America (GCSAA) Scholarship & Research (S&R) foundation. The commitment, which totals \$50,000, was announced after the group's annual meeting in December.

Dennis Orsborn, president of the California GCSA, said the chapter wanted to make a statement about the importance of supporting the foundation. "We realize that a national effort like this requires quite a bit of money. You can't do it for free. Organizations like ours have to be leaders in providing those funds," Orsborn said.

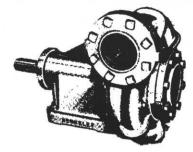
The state group made the gift in conjunction with the other regional and local superintendents' associations within California. Orsborn said that contributions from each of the local groups and increased revenues from the chapter's four-color publication, *California Fairways*, enabled the statewide contribution.



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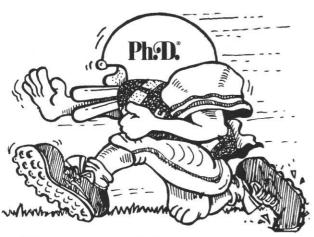
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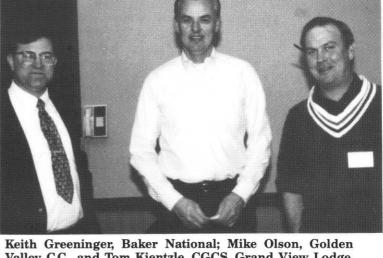
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Todd Grimm, Moorhead, takes a moment to chat with Woodhill's Rick Fredericksen, CGCS.

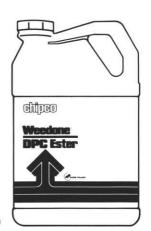


Valley C.C., and Tom Kientzle, CGCS, Grand View Lodge, poised and ready for the day.



Glen Leitner, CGCS, and Kerry Glader of Precision Turf enjoy the morning break.

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