### <u>New!</u> Cleary's Waterless Hand Cleaner.

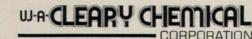
Stains and

Removes Pesticide Stains and Residues. ■ Grease ■ Oil ■ Tar ■ Ink ■ Paint ■ Carbon ■ Adhesives

CLEARY'S WATERLESS HAND CLEANER is designed for use by pest control companies, turf, nursery and maintenance superintendents, farmers, mechanics and technicians. It will safely remove stains and residues from hands while leaving a fresh orange fragrance.

For additional information, see your local distributor or contact: W.A. Cleary Chemical Corporation, 1049 Somerset Street, Somerset, New Jersey 08873 (201) 247-8000. Toll Free Numbers: 1-800-524-1662 (East of the Mississippi) 1-800-524-1663 (West of the Mississippi).

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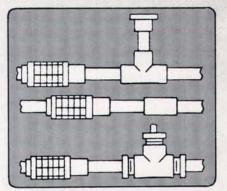
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Repair a broken line – quickly and permanently. It's easy with Slip-Fix. There's no need to dig back long sections of pipe. And no nuts to tighten. Simply remove the damaged piece, drop in Slip-Fix and glue. A tight, permanent seal is guaranteed. Also, its sure-grip waffle pattern allows for a firm grip – even in wet or muddy conditions.



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#### VOLUME FIVE, NUMBER TWO

FEBRUARY 1989

#### MAIN EVENTS

#### 16 DESERT MOUNTAIN: BUILT TO ENHANCE AND PRESERVE THE NATIVE LANDSCAPE

The community of Desert Mountain in Scottsdale, AZ, was planned around three golf courses, appropriately given names reminiscent of Arizona's Native American heritage: Cochise, Geronimo and Renegade. Superintendent Ron Ruppert manages the unique double-flag Renegade course, designed by Jack Nicklaus so that average golfers can play alongside scratch golfers with the same enjoyment. Ruppert utilizes a state-of-the-art irrigation system to protect desert plants and to comply with the most stringent water-conservation regulations in the country.

#### 30 DRAINAGE: THE SAFETY NET OF SPORTS TURF MANAGEMENT

Many sports turf problems can be attributed largely to one cause – poor drainage. If superintendents and other sports turf managers are expected to keep high-use recreational turf areas in play, they must have adequate control over soil moisture. This article provides a basic understanding of how each component works to achieve both surface and subsurface drainage.

#### 44 PREPARING FOR THE SENIORS AT PGA NATIONAL

For 73 years the Professional Golfers' Association of America has organized tournaments for its members. Few are more important than the Seniors Championship held this month at PGA National, the home of the PGA in Palm Beach Gardens, FL. Greg Pheneger, general manager for golf course operations, describes how he and his crew prepare for the event in the midst of the winter Club Pro tournaments.

#### 51 THE EFFECT OF SEEDING RATE ON DISEASE AND WEED ENCROACHMENT

Dr. A. Douglas Brede, research director for Jacklin Seed, explains how certain seeding rates of Kentucky bluegrass can discourage encroachment of annual bluegrass and influence the incidence of leafspot and Fusarium blight. He also indicates that it is desirable to use higher seeding rates with lower cutting heights.

#### LINE-UP

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- **14** THE EXTRA POINT
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- SO NUUNIES
- 66 SCOREBOARD

**COVER:** The austere beauty of the desert dominates each hole at Desert Mountain Renegade in Scottsdale, AZ. Photo Courtesy: Brian Morgan Golf Photography.

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FROM THE PUBLISHER hen we began publishing sports TURF three years ago I knew that we were charting new waters. For the first time, a publishing company in the growing turf and landscape industry realized the need to address only the needs of those who toil on large, high-traffic turf areas. It was my feeling that by directing a magazine to those the take core of colf courses, exerts complexes, inverses, and the take core of colf courses. who take care of golf courses, sports complexes, universi-

WID LANE CARE OF YOUR COURSES, SPORTS COMPLEXES, UNIVERSI-ty and campus grounds, parks & recreation facilities, etc., We could zero in on preceine probleme not requireful covered ty and campus grounds, parks & recreation facilities, etc., we could zero in on pressing problems not regularly covered Until we came along, many of the non-association publi-ations covered both the coll course market and the land cations covered both the golf course market and the land-Scape contractor - and even some of the lawn care people. They still do. We felt we were on the cutting edge. Little did I realize how vicious the "com-petition" would be, nor did I realize how they would distort the truth about sportsTURF. by other magazines.

I ney still do. We felt we were on the cutting edge. Little did I realize now vicious the "COM" petition" would be, nor did I realize how they would distort the truth about sports TURF. I also realized that no one had readership statistics based on outside research. So we etition" would be, nor did I realize how they would distort the truth about sports IUHF. I also realized that no one had readership statistics based on outside research. So we commissioned Simmons Market Research Bureau to conduct a study of the market. Be-Laiso realized that no one had readership statistics based on outside research. So we commissioned Simmons Market Research Bureau to conduct a study of the market. Bureau to conduct a study of the market. Bureau to wanted to know if we are impacting this market. des, I wanted to know if we are impacting this market. The study was done in November 1988. A questionnaire was sent to 1,000 golf course uperintendents, stadium managers, university groundskeepers, park superintendents The study was done in November 1988. A questionnaire was sent to 1,000 golf course superintendents, stadium managers, university groundskeepers, park superintendentian and sports turf contractors. More than 56 percent of those who received a questionnaire superintendents, stadium managers, university groundskeepers, park superintendents and sports turf contractors. More than 56 percent of those who received a questionnaire responded back to Simmons. sides, I wanted to know if we are impacting this market. The etudy was done in Nevember 1999. A questionnaire sponded back to Simmons. The survey results show that you are a well-read group and receive at least four to ix different publications that claim to pertain to this field. Over 85 percent of those who

Ine survey results show that you are a well-read group and receive at least four to six different publications that claim to pertain to this field. Over 85 percent of those who responded read sportsTLIRF regularity. We received the highest readership ratio of any six different publications that claim to pertain to this field. Over 85 percent of those who responded read sportsTURF regularly. We received the highest readership rating of any publication (the others had ratings of between 20 and 54 percent). I think this proves that responded back to Simmons.

responded read sportsTURF regularly. We received the highest readership rating of any publication (the others had ratings of between 20 and 54 percent). I think this proves that our readers appreciate the fact that sportsTURF is edited just for them. If readers appreciate the fact that sportsTURF is edited just for them. What we wanted to know most was how sportsTURF compared with these other maga-ines in providing you with the poll course and sports turt management information you publication (the others had ratings of between 20 and 54 percent). I think this our readers appreciate the fact that sportsTURF is edited just for them. What we wanted to know meet was how coarter TURE compared with the What we wanted to know most was how sports TURF compared with these other maga-zines in providing you with the golf course and sports turf management information you need. Which magazine provides you with the best in-denth information, the most un-tozines in providing you with the golf course and sports turf management information you need. Which magazine provides you with the best in-depth information, the most up-to-date information and the most useful information? In all cases, the survey results date need. Which magazine provides you with the best in-depth information, the most up-to-date information and the most useful information? In all cases, the survey results gave sportsTURF sizeable leads

portsTURF sizeable leads. Here are some interesting statistics generated by the survey. Those superintendents and aroundskeepers who manage budgets reported the following average annual expen-Here are some interesting statistics generated by the survey. Those superintendents and groundskeepers who manage budgets reported the following average annual expen-ditures for 1988: You spent \$25,325 on chemicals, \$31,466 on vehicles, and \$31,936 for and groundskeepers who manage budgets reported the following average annual expen-ditures for 1988: You spent \$25,325 on chemicals, \$31,466 on vehicles, and \$31,936 for mowers, aerators and spravers, \$22,383 of your 1988 budget went for irrigation compoditures for 1988: You spent \$25,325 on chemicals, \$31,466 on vehicles, and \$31,936 for mowers, aerators and sprayers. \$22,383 of your 1988 budget went for irrigation compo-nents while \$10,368 was spent on seed. Last year you also paid an average of \$35,640 mowers, aerators and sprayers. \$22,383 of your 1988 budget went for irrigation compo-nents while \$10,368 was spent on seed. Last year you also paid an average of \$35,649 for water and \$214,000 on labor sportsTURF sizeable leads.

r water and \$214,000 on labor. The Simmons study showed that during the next 12 months 62 percent of you will pur-hase new mowers. 50 percent of you will buy irrigation components, and about 40 per-The Simmons study showed that during the next 12 months 62 percent of you will pur-chase new mowers, 50 percent of you will buy irrigation components, and about 40 per-cent will buy new vehicles and various types of trimmers. Nearly a third of you will invest chase new mowers, 50 percent of you will buy irrigation components, and about 40 per-cent will buy new vehicles and various types of trimmers. Nearly a third of you will invest in tractors, spravers, turf vacuums, and painting/marking equipment. Aerators, topdress cent will buy new vehicles and various types of trimmers. Nearly a third of you will invest in tractors, sprayers, turf vacuums, and painting/marking equipment. Aerators, topdress ers and trenchers are also figured in your budgets for this year. for water and \$214,000 on labor. is and trenchers are also figured in your budgets for this year. Some months ago, Bruce gathered some facts and figures. It may have surprised some, but it came as no surprise to us that your segment of the Green Industry—we like to call Some months ago, Bruce gathered some facts and figures. It may have surprised some, but it came as no surprise to us that your segment of the Green Industry—we like to call it the institutional market—spends over \$10 billion annually. In tractors, sprayers, turr vacuums, and painting/marking equipment ers and trenchers are also figured in your budgets for this year. Some months and Bruce nathered some facts and figures it may

the institutional market—spends over \$10 billion annually. I would call us a large industry, but more importantly, we are healthy and continuing o grow. I am proud to be able to play a small role in your growth. but it came as no surprise to us that your segment of the oreel it the institutional market-spends over \$10 billion annually. grow. I am proud to be able to play a small role in your growth. 1989 looks to be a very strong year for the entire industry. I look forward to another xciting year. t would call us a large industry, but more importantly, we are healt to grow. I am proud to be able to play a small role in your growth. 1989 looks to be a very strong year for the entire industry. Look

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exciting year.