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In Ohio, Dial 1-800-362-7413
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Those east of the Mississippi can reach her by dialing 1-800-321-5951. (In Ohio, dial 1-800-362-7413.) If you're west of the Mississippi, call Barb collect at 216-323-7544.

She'll have our representative contact you so you'll know what Lescosan can mean to you and how our other fine LESCO Products (including LESCO 36 Sulfur Coated Urea) are selling themselves every day!

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Lesco MSMA — Lesco Thiram 75W — Lescosyme — Lakeshore Chinch Bug & Sod Webworm Control

Scotland



English Hawthorn tree (above) on St. Andrews Golf Course shows effects of high winds and blowing sand, characteristics of the links area of Scotland.

Sod wall trap (left) on St. Andrews keeps sand from eroding away.



during my visit. At St. Andrews where fairway aerifying had been done, the golfers were playing preferred lies. Greenkeeper Walter Wood explained to me that the Royal and Ancient Golf Club did not have much to say about this rule being used on the course because all four courses at St. Andrews are owned by the people of the City. Walter mentioned that he had a rather large sod nursery.

Sod is used in large quantities when traps are built or rebuilt. The sod wall faced trap is the rule, not the exception. With the soil being so sandy it is the only practical way to hold a steep bank. Many of the bunkers are small and are sunken below ground level to the point that hand raking is the only way to care for them. No rakes are left on the course for golfers to use.

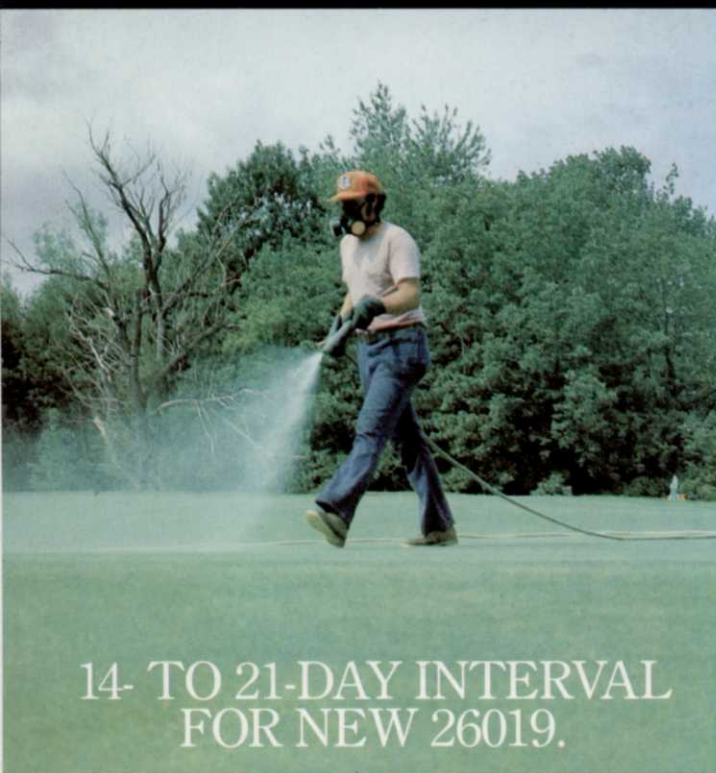
Golf in Scotland is for everyone not just the rich. With about the same area as the State of Maine, Scotland boasts over 350 golf courses. Many are available to the residents for free or a small fee. It does not cost very much by U.S. standards to maintain a course there. While they are trying to maintain their courses as they have always been,

we in America are striving for a very high standard of excellence. The important difference of their not having motorized golf cars cannot be overlooked in regard to maintenance. Any golf course that must stand the wear and tear of golf cars must be watered and fertilized more in order to take it, however most of us are guilty of overmaintaining areas that are not in play.

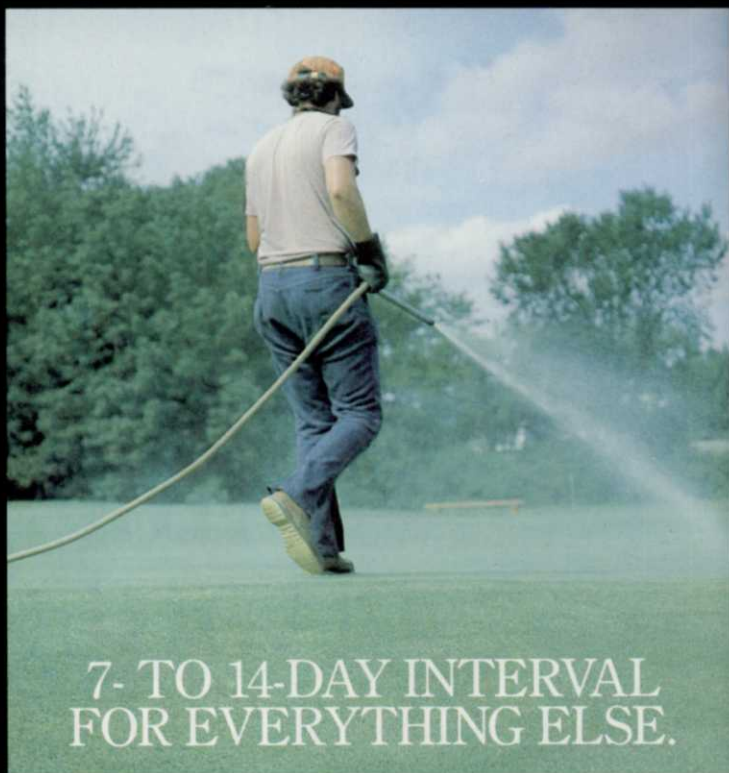
Because Scotland is the home of golf, it would be good for any course superintendent to visit there to see the original golf courses from which our present day golf course has evolved.

WTT

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FOR NEW 26019.



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Here's a new fungicide that could change your whole way of thinking about broad-spectrum fungus control *and* spray intervals. Because new Chipco 26019 gives more control with fewer sprays than any of the old fungicides you've had to use.

It stops the major turf diseases—dollar spot (including benomyl-resistant dollar spot), brown patch and Helminthosporium (leaf spot). And it does it for up to three weeks, at low, economical rates.

It's a nice material to handle, too. It's very soluble, and mixes well, with no residual left in the tank. It also presents no problems of phytotoxicity to turf.

Last year was a wet one, with unusually high disease pressure in most areas. Yet, Chipco 26019 performed beautifully in wide-spread tests. This year, you'll have the chance to see how well it can perform for you. So ask your chemicals distributor for this welcome addition to the popular Chipco line of turf fungicides and herbicides. It will outperform anything else you can use, with about half the number of sprays.

NEW CHIPCO 26019

(IT LASTS UP TO 21 DAYS).



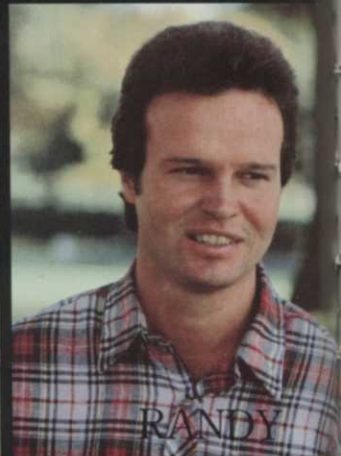
"YOU FOLKS HAVE SOMETHING GOOD HERE."



BOB



PAUL



RANDY

"The main reason I'll use Chipco 26019 is to control dollar spot. Picking up brown patch and the others is gravy, as far as I'm concerned. This is a real good new chemical."

—Bob Dickison, golf course superintendent
Upper Montclair Country Club, Clifton, N.J.

"I feel very good about this product. We tested it during one of the roughest summers in my memory. I think, over a 14-day period in August, we had very close to 10 inches of rain. It was an acid test for the material. These chemicals come and go, and some of them are short-lived. But you folks have something good here. The sprayability of Chipco 26019 is very impressive. And you only need six to 10 hours of drying time, which helps a lot during rainy periods. Some other materials require at least 12 hours."

—Paul Boizelle, golf course superintendent,
and John Fenwick, foreman,
Fiddler's Elbow Country Club, Far Hills, N.J.

"We started using Chipco 26019 in June of 1977. Before we started using it, we had very little luck with our other contact and systemic fungicides in certain areas. We were applying some contact fungicides at preventative and curative rates, and still only getting two or three days control, with the usual cold fronts coming through, followed by large outbreaks of dollar spot. Since we started using Chipco 26019, we haven't found dollar spots in these areas at all."

—Randy Wahler, golf course superintendent
Glen Flora Golf Course, Waukegan, Ill.

Rhône-Poulenc Inc. Agricultural Division, Monmouth
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Please read labels carefully, and use only as directed.

GCSAA WINTER CONFERENCE REPORT SESSIONS, SHOW DREW OVER 6000

The 50th International Turfgrass Conference and Show in early February had all the elements of a successful trade show, a fantastic location in Atlanta's Georgia World Congress Center, more than 6,000 attendants and 200 exhibitors, good hotels, and a speaker program kicked off with a strong motivational speech. Add the organization and service of the Golf Course Superintendent's Association of America staff and the net effect was a model trade show.

It was obvious that GCSAA had made changes from previous shows to provide a more responsive program. Technical subjects were simplified, superintendents took on a bigger share of the speaking role, and special interest topics were broken out from the rest of the sessions. The exhibit floor allowed more room for delegates to see booths and relax. Transportation from hotels was very convenient.

Session topics included landscaping, water and effluent, fertigation, turfgrass improvements, root-zones, personnel management, composting, and diseases. Sand topdressing was one of the most controversial topics. Three superintendents described their experiences with sand topdressing. Ray Knapp of Tuckaway Country Club in Franklin, WI, has found regular light topdressing with sand provides a considerable amount of sand over a year's time and eliminates thatch problems. Knapp has all but eliminated aerification of greens and



Engel

Miller

has reduced application of fungicides because of the topdressing program.

George Burgin of Atlanta Country Club started using sand topdressing to correct compaction problems and to reduce aerification from five times per year. Burgin stopped his topdressing when he noticed while cutting cups, that the root system extended only into the sand and not below. Burgin said, "Sand topdressing may be necessary under poor soil conditions, otherwise leave a good thing alone."

Reduced *Poa annua* population was one benefit of sand topdressing according to Charles Nolan of Inglewood Golf and County Club, Kenmore, WA. Nolan's greens were constructed in 1918 of organic soil and contain no drain tile. Nolan has adapted a topdresser so that a two-man crew can topdress all 20 greens in one morning.

Both Nolan and Knapp have customized their topdressers to improve speed of application and loading. Disturbing play with heavy applications is generally avoided by more frequent light topdressing.

How to live with rising water costs and drought was discussed by Jim Prusa of Pasatiempo Golf club in Santa Cruz, CA. Deciding where not to irrigate because of rationing, guarding against unscrupulous well drilling companies, and handling monthly water bills of \$12,000 for irrigation are just three of the reasons Prusa has been forced to make sacrifices at Pasatiempo. To compensate for the cutback in water usage, Prusa has increased aerification, sand topdressing of greens, mowing heights, hand watering, efficiency of irrigation system, use of native plants in the landscape, and use of drip irrigation. The biggest move is to arrange the use of effluent water under a publicly funded project. Not only will the state and federal governments pay the brunt of the installation cost, but Pasatiempo's water rate will be reduced by two thirds.

Effluent water must be checked for salt content and other factors which can affect plant growth. Dr. Wade Berry of the University of California, Los Angeles, suggested USDA Handbook No. 60 for ac-

Tadge

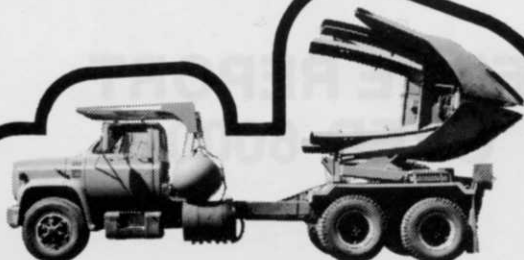


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ceptable levels of salts in effluent water. Berry said effluent usually contains desirable elements like phosphorus and potassium, but that these chemicals will also encourage algal growth in ponds and streams and possibly on grass.

Richard Nugent of Killian and Nugent, Palatine, Illinois, said the government will allow up to 85% percent financing for distribution of effluent on land. Any system using effluent water, however, must contain storage facilities since sewage plants work all year and seasonal contracts are less attractive. Other considerations are good drainage to help leach out toxic metals, odor in early spring, and education of the golfer to the use of effluents.

Dr. Ralph Engel, professor of turf science, Rutgers University, New Brunswick, NJ, showed that ideal root growth conditions are not also ideal for appearance in bentgrass. One to three waterings per week with good soil penetration should be sufficient, Engel stated. Syringe as needed and provide proper drainage. Watering practices can effect varieties dominating. Bentgrass requires the most water, turf type ryegrasses require more than bluegrasses.

Dr. Houston Couch, author and professor of plant pathology at Virginia Polytechnic Institute, described basic characteristics of pesticide carriers. Couch said data is lacking on the effect of the amount of water carrier in a mix. However, it is known that pH of the water carrier affects the length of time a mix can be stored and remain effective. Couch said strong alkaline water will deactivate fungicides. Basically, wettable powder forms of fungicide require less material and perform more quickly and more effectively than granular forms. However, Couch said systemic fungicides have greater potential when applied in granular form.

ChemLawn Vice President Robert Miller said the pH of the water carrier can reduce the effectiveness of dylox from days to an hour. Miller said timing incompatibility also exists, such as combining a preemergent herbicide with a broadleaf contact material.

Miller made these suggestions for mixing pesticides:

- never mix pesticides in concentrated form
- never mix organic fungicides with fungicides using xylene as a solvent
- place wettable powders in tank first, the flowables, water soluble powders, surfactants, and emulsifiable concentrates.
- do jar test and test plot when possible
- when mixing pesticides with soluble fertilizer use urea in preference to other water soluble fertilizers.

Dr. Reed Funk, research professor of turfgrass agronomy at Rutgers University received GCSAA's Distinguished Service Award for his work with turfgrass breeding. Dr. Funk's program is one of the most extensive and productive in the world. A considerable amount of variety improvement and testing has taken place under Funk's direction.

Charles Tadge, superintendent of Mayfield Country Club in South Euclid, OH was elected president of the Association. Melvin Lucas, superintendent of Piping Rock Club, Long Island, N.Y. is the new vice president.

The 1980 GCSAA Show is set for St. Louis. **WTT**

ALCA honored by Houston Mayor Houston Landscape Week proclaimed

February 4-10 was proclaimed Houston Landscape Week by Mayor Jim McConn in honor of the 1979 Associated Landscape Contractors of America meeting. McConn noted three worthy characteristics of landscape contractors in his proclamation: "WHEREAS, the natural living environment is the basic environment of human life, in which all people function; and WHEREAS, the landscape contractor, in his daily work, installs, enhances, and maintains the natural, living environment; and WHEREAS, the leading landscape contractors from throughout the United States and abroad are assembling in Houston. . ."

Election of officers

Bill Thornton, Jr., a principal of Thornton Environmental Industries, whose main responsibility is for Thornton Landscape, Inc., was named the 17th president of ALCA. Thornton resides in Cincinnati, Ohio.

President-Elect is Wallace SaBell. He is president of SaBell's, Inc., in Lakewood, Colorado.

Other officers elected include vice presidents Ritchie Skelton, president of Duncan Landscape Associates of Vienna, Ohio, and Allen Keesen of



William G. Thornton, Jr.

Allen Keesen Landscape, Inc., Denver, Colorado.

The treasurer is Ray Gustin III, Gustin Gardens, Inc., in Gaithersburg, Maryland. David Pinkus, North Haven Gardens, Dallar, Texas, is the secretary. Ron Ahlman is the Immediate Past President.

The new officers will serve until the next meeting in February of 1980.

Awards

The Ninth Annual Environmental Improvement Awards were announced and some nineteen projects recognized at the meeting. The awards are made each year in three classifications: Environmental Grand Award, Merit Award and Award of

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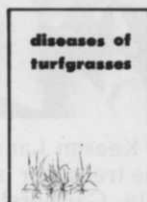
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Couch's Diseases of Turfgrasses is one of the best references on that subject to date. No turf library is complete without it. It provides an in-depth analysis of turfgrass disease causal organisms and control of them. From diseases caused by pathogenic plants to viral turf diseases, Couch presents information necessary for any plantsman to achieve fine turf.

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WOODY LANDSCAPE PLANTS

Manual of Woody Landscape Plants is a valuable reference for anyone interested in woody plants. The book provides concise, factual information on common and not-so-common woody ornamentals, ground covers and vines as well as the narrowleaf and broadleaf evergreens which are adapted to Midwestern and Eastern climates.

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TREE MAINTENANCE

Tree Maintenance is an indispensable guide to anyone involved with the care and treatment of trees. All phases of tree care are described in non-technical language. The book includes a comprehensive list of effective and safe pesticides for trees.

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GUIDE TO TREES

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TREE FARM BUSINESS MANAGEMENT

Tree Farm Business Management covers all phases of a tree farming operation, from obtaining an accurate timber inventory to timing sales for profitable results. Budgeting, preparing scientific financial forecasts, special tax problems, and other financial matters are given thorough coverage.

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DISEASES OF SHADE TREES

Diseases of Shade Trees is an excellent introduction to tree diseases, including infectious and noninfectious. Part III, Special Topics, covers nonpathogenic conditions, disease diagnosis and living hazard trees. The book describes the theory and practice behind maintaining a healthy tree that serves a positive purpose.

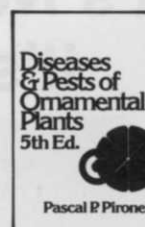
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SOIL MICROBIOLOGY

The second edition of Soil Microbiology integrates microbiology, soil science, and biochemistry to characterize soil microflora. The revised edition adds a closer scrutiny of environmental problems, information on soil toxicants formed by microorganisms, and a chapter on microbial metabolism of pesticides.

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Diseases & Pests of Ornamental Plants, fifth edition, includes new ornamental disease hosts, identifies new diseases, and describes the spread of known diseases to a wider range of host plants. The book keynotes environmental factors adverse to the health of 500 ornamentals.

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