NOTICE

The tentative dates of our Midwest Turf Clinic will be either November 1st to November 3rd or November 15th to November 17th, 1983 at the Arlington Park Hilton. The date of the clinic as of Tuesday, January 18th, 1983 is November 1st to November 3rd. We are going to need speakers for Wednesday, November 2nd, 1983, as this will be the day in which the Midwest Superintendents Association will perform its interesting, beneficial and educational enlightenments to the turfgrass industrialists.

The University of Illinois would like to stay with the same format as much as possible, therefore we will need 12 to 15 guest speakers for our day of the clinic. Anyone interested or is considering being a speaker should contact the educational committee. The educational committee members are Ken Goodman, Dave Behrman and Julius Albaugh.

The Midwest Superintendents will have to make a commitment to the educational committee by July 1st, 1983. The reason we need this response so early is because of the printing and mailing of the brochure sometime early in August, 1983.

Ken Goodman 291-2200

A NEW ERA OF PESTICIDE MANAGEMENT

With the advent of many new fungicides on the market, as well as breakthroughs in application techniques and tank mixed formulations, we are on the threshold of a new era in chemical and disease management. Our awareness of chemical and the modes of disease cycles is developing into an exciting scenario. Today we have more tools to get the job done than ever before and different ways to use them. I feel that anyone who is not closely following these new developments, testing the chemicals, theories and intergrating them into their particular programs, is missing the boat! The new chemical crunch has arrived almost too fast. We hardly have a chance to thoroughly test a new product, it's mode of action, how to use it effectively and in combination with other chemicals then suddenly someone develops a new product. We can easily waste money combining fungicides if we don't fully understand them. At Skokie we've had so much experimenting going on we could probably use another eighteen hole golf course just for field trials!

Where is all this taking us? It's apparent that in the short term we're stocking up larger inventories of expensive chemicals with the hope that in the long run we can reduce our chemical budgets. Wrong! Along with the advent of these new chemicals arises new diseases and harder to control strains of old diseases. How long has it been since we've seen "yellow-tuft"? It is quickly developing into a recurring problem on Penneagle. How about algae development from an anerobic condition associated with high sand content alkaline green structures. In the southwest their finding that heavy use of **subdue** has shown toxicity. Thank God "Dr. Hank Wilkinson" is here to help us out in Illinois. It sounds like he's got his hands full!

John Berarducci

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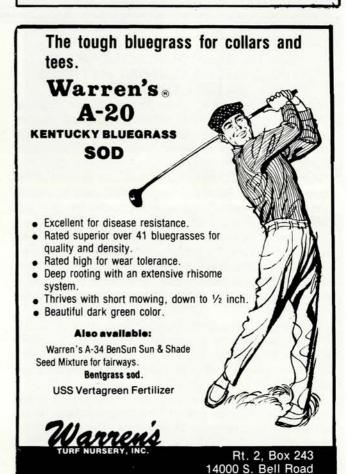
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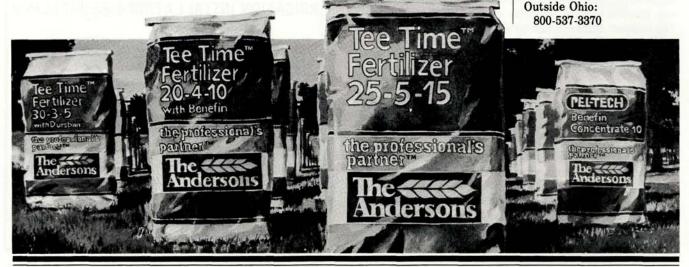
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Approved label use includes application of 1.3 to 4 oz. of Banol in 2-5 gal. of water pr 1,000 sq. ft. as a preventive treatment when weather conditions favor development of Pythium blight. A repeat application may be made in 7-21 days if weather conditions remain favorable for disease development.

According to researchers, disease development appears most favorble when the maximum daily temperature is 86°F. or higher followed by 15 or more consecutive hours with relative humidity at 90% and above while temperature remains 68°F. or warmer.

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In another university test, turfgrass was inoculated with Pythium 21 days after treatment with Banol at 1.875 and 3.75 oz. of active ingredients per 1,000 sq. ft. Plots rated seven days later were found to be relatively free of Pythium blight when compared to control plots and those treated with another Pythium fungicide. Both studies involved treatment under artificially high temperature and humidity conditions which favor fungi growth.

Laboratory tests at two universities also confirmed that rainfall immediately after treatment had little or no effect on Banol's efficacy. In addition, tests indicate that when applied at proper rates Banol has no phytotoxicity on most turfgrass varieties.

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The guest speaker for the Midwest Supt. meeting at Silver Lakes Golf Club on March 15, 1983 will be Dick Lanscioni, PGA Golf Professional at Green Acres Country Club, Northbrook, IL.

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MR. GREEN COMMITTEE CHAIRMAN

For the last four years, I have been green committee chairman at Colonial Country Club, in Fort Worth, Texas, the home of the Colonial National Invitation Tournament. This is a golf-oriented club, with over 40,000 rounds played each year. Golf has been good to Colonial, and the Board feels strongly about the continued improvement of the course. Over the last four years, more than \$400,000 has been spent on golf course improvements, including a new automatic irrigation system and pump station, a new and efficient maintenance building, a new 10,000 square foot putting green, a new design and construction of the par 3, 13th hole, a new 16,000 square foot bentgrass nursery, and all our asphalt cart paths were relocated and replaced with concrete.

In 1977, Paul Cano, our golf course superintendent, retired after a 42-year career at Colonial. Replacing him was very difficult, but during this process I gained tremendous respect for the profession of golf course superintendents. We interviewed several men for the job, and I can truthfully say that every applicant was extremely qualified, proud of his profession, and interested in improving himself. With this background and experience I do not consider myself an expert, but I have learned just enough to develop some opinions. So the following thoughts are the way I see it as **Mr. Green Committee Chairman**.

Most clubs are judged by their golf course, its layout and condition. Country clubs were created primarily for golf, and members need to understand the importance of their golf course. If it were not for the course, the clubhouse, tennis courts and swimming pool would probably not have been built. It follows that the green committee should be one of the most important and most active in the club. With this understanding, it puts great importance on the selection of a green committee chairman. In my opinion, a chairman should meet the following qualifications:

- 1. He must be an active golfer (not necessarily a low handicapper) and enough a student of the game to have a working knowledge of the Rules of Golf.
- He must be a fair, understanding and flexible person who has enough maturity and self discipline to recognize that he is not an agronomist.
- 3. He must be a man who has easy access to the Board of the club, probably as a member of the Board. This enables the Board to be kept up-to-date and to be in a position to understand and explain the activities on the course to members. An informed Board is easier to sell on budget or the need for additional capital expenditures.
- He must be a man who has time to give to the job and a great pride in the golf course.

The other committee members should be basically like the chairman. They need to be chosen by the chairman, or at least approved by him. The committee must have very good communications. I recommend a small committee, three people or less, and in many cases only a chairman without a committee. Meetings with the superintendent are held at all times in many places, and this makes getting a large committee together very difficult. The chairman and superintendent should have regular meetings while they inspect the course.

The green committee chairman should help the superintendent with his budget and with policymaking problems. The green committee chairman has a good feel for the pulse of the club's thinking and of its financial condition. He should work closely with both operating and capital expenditure budgets. The operating budget should be updated every six months to better relate to the changes constantly occurring on the course. Most of these changes will be in labor, since this makes up about 70 percent of the operating budget.

I feel that the large turnover rate in the labor force is a major problem on most golf courses. Part of the reason for the problem is the low wage scale set up by many clubs. It is increasingly difficult to find good men to work the odd hours, often under less than comfortable conditions. You get what you pay for! It is not good business to put expensive equipment and a valuable golf course in the hands of low-priced, unskilled labor. With the equipment technology in the turf industry improving daily, our golf courses should be able to do more with less people, but it will mean that each workman must be better qualified.

When you have good management, you do not have surprises. This is especially true on your capital expenditures. It is essential to have good records on maintenance equipment and to be realistic about its estimated life. Be certain that your Board knows when your large dollar needs will occur. The green committee chairman and superintendent can hurt their credibility with large emergency needs in capital expenditures.

The green committee chairman and his committee should demand a high degree of maintenance on the golf course. The superintendent is responsible for the manner in which the golf course is maintained. He should not have any doubt about what condition the Board and green committee chairman expect. He must know that standard set down by the Board, and along with this responsibility, he must have authority and complete control over his crew and equipment. The green committee chairman and his committee cannot nit-pick the golf course. They must judge the superintendent and his organization on the complete job. The superintendent and his crew must try to view the course and its condition as the green committee chairman and club members see it

There must be a close relationship between the green committee chairman and the golf committee chairman, just as there should be a close relationship between the superintendent and the golf professional. Communication and mutual respect is essential or the club will be the loser. The superintendent and the golf professional must pursue the same goal — "The playing condition of the golf course!" I strongly recommend that these two men have regular meetings on the course so that each man can better understand the other's problems. A well-informed golf professional can be a great public relations man for the superintendent. I believe that for such things as hole locations, tee marker location, and width of fairways, the superintendent must have the cooperation of the golf shop for the good of the club.

The superintendent must have a calendar of all scheduled golf events at the beginning of each year, and course maintenance needs must be considered when making the calendar of events. For instance, it is bad to find the greens aerified the day before a big club tournament, simply because the superintendent wasn't notified. At times of adverse weather, this line of communication is also very important. I feel that the superintendent should have a complete authority over whether golf carts are to be permitted on the course and when play is to be kept off the course because of freeze or frost. Other closings of the course should be by mutual decision of the superintendent and the golf professional. If they don't agree, then the green committee chairman and the golf committee chairman must step in and do what is best



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for the club. The green committee chairman and superintendent must never forget that the main reason for the golf course is to accommodate the members.

The green committee chairman and superintendent have a commitment to the club to maintain the philosophy and character of the golf course. All major changes must be approved by the Board. The green committee chairman's job is not to rebuild the course the way he wants it. The green committee chairman and superintendent can and must prevent changes such as: the greens changing shape, loss of hole locations, bunker changes in their depth or shape, uncontrolled tree growth, or changing of green contours. I recommend annual photographs of the golf course so that it does not change in front of our eyes without our noticing it. Hiring a qualified golf course architect is often beneficial in maintaining your philosophy in course character. An architect can also be of great assistance in rebuilding and making major changes when they become necessary.

What does a green committee chairman expect from his superintendent?

The superintendent must have confidence in the green committee chairman and he must be extremely loyal to the chairman. The chairman must never hear of something the superintendent says from another source; it must be said directly to the chairman.

The superintendent must be organized, have the ability to handle men, and be tactful enough to handle members. He must have goals, both long and short range. His standards for maintenance should be high, with extreme pride in the golf course. He must be a leader of men and must be able to delegate responsibility.

The superintendent, like the green committee chairman, should play golf and be knowledgeable about the Rules of

Golf. He must know how to define the hazards correctly and realize the importance of these hazard lines being maintained. He must have ability as a mechanic, and with his work on budget, planning and purchasing, he needs to be a good businessman.

It goes without saying, but he must be well-founded in principles of agronomy. He must keep abreast of new developments in the industry. The green committee chairman can help by making sure the club sends the superintendent to state and local turfgrass conferences, the annual GCSAA International Turfgrass Conference and Show and the USGA Green Section Annual and Regional Meetings. The superintendent then accepts the responsibility to attend all sessions and gain as much knowledge as possible to bring back to the club and his organization.

The superintendent must have an open mind to the fast changes in the industry. He should also have a good nursery of both his green and fairway grasses where he can experiment before gambling with them on the course. The superintendent cannot be afraid to say, "I don't know," or "I was wrong." Excuses, alibis and blaming others will cause the green committee chairman to lose confidence. No superintendent can afford for this to happen. The industry has a lot of specialists who are willing and able to help, such as the USGA or the outstanding universities in our country. A good superintendent will make use of all technical resources available to him.

As Mr. Green Committee Chairman, most of the reward comes in your own mind and the pride you have in the changes, or lack of changes on the golf course ... and in a member saying, "I have never seen the course in finer condition."

Paul D. Cato, Jr., Pres.
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PUTTING GREEN COMPLEX

Maintenance of today's putting green involves more than just the putting surface; it includes the collar, the approach, and the surrounding rough areas. Bunkers are not included since, by Definition 14, they are separate areas. Each of these areas requires separate maintenance, and yet each one is dependent upon the other.

The Collar and Approach

In 1974, the USGA Green Section, in its soil specifications for putting green construction, recommended that collar soil and putting green soil be similar. By inclusion, the collar was recognized as an important part of the putting green area and, as such, should receive the same careful preparation during construction and subsequent maintenance.

This is not to say that collars on greens not built to USGA specifications should receive less care and maintenance than the putting green. On the contrary, collars actually can determine to some degree the maintenance practices planned for the putting green themselves...especially water management. There is no formal definition of a collar in the Rules of Golf. Areas not defined are simply termed, "Through the Green." In common usage, collars are generally considered to be approximately a three-foot-wide area of turfgrass, mowed at an intermediate height between the putting green and fairway. However, collar widths vary. Some clubs prefer broad collars, while others maintain them relatively narrow. The choice is the club's and is usually determined by the equipment available to maintain these areas economically, the design of the green, and the distance the bunkers are situated away from the putting surface.

In the preparation of courses for USGA championships, the collars are 36 inches or less in width. Formidable rough is usually adjacent to the collar so that only well-played shots to each green are rewarded.

The Collar and the Rough

For most golf courses, a 4-to 5-inch rough immediately adjacent to the collar for regular membership play is too severe. There are compromises in the grass cutting heights for championships and regular play. Some turf managers and club officials believe that collars should be wide in order to ease and speed play. It is possible that just the opposite is true. For example, when a ball rolls over a wide-collared green, the ball will tend to continue to roll a greater distance from the putting green surface. Contract this to the same shot rolling over the green onto a narrow collar and stopping much more quickly in a normal rough area near the putting surface. The golfing whose ball rolled over the wide collar faces a longer chip shot. The golfer closer to the green should have a better opportunity to play his next shot close to the hole. This could mean fewer strokes and, potentially, speedier play. Narrow collars with more rough around the green also can be better for the grass and easier and more economical to maintain for the golf course superintendent. It simply stands to reason that grass maintained as rough around the green

- 1. Better resistance to wilting.
- 2. Better resistance to traffic.
- 3. Better resistance to weed infestation.
- 4. Less disease and thus less chemical usage.
- 5. Better overall vigor and competition against Poa annua, especially in the cool season grass-growing regions where there is constant competition between Kentucky bluegrass and annual bluegrass. On the collar area, Poa annua is much more competitive than Kentucky bluegrasses, and it tends to dominate. Usually only bentgrasses or perennial

ryegrasses compete with the annual bluegrasses in the northern cool season turfgrass areas on collars. By narrowing the collar, the Kentucky bluegrasses will tend to dominate the annual bluegrass in closer proximity to the green. The result is grass that is better, stronger and easier to maintain.

It follows that relatively narrow collars with well-maintained rough areas are good for the game and good for the maintenance of the golf course.

Collar Maintenance

Collars are difficult areas to maintain. In many cases, soils under collars are of a finer texture, containing more silt and clay than the greens mixture. In new construction, collars have often been considered not as important as the putting green itself; therefore, they received less attention in the attempt to save money during construction. In our refined specifications for putting green construction, the USGA Green Section has attempted to correct this notion by recommending that collars be constructed exactly the same as the putting green itself.

This is fine for new construction, but many greens, especially on older golf courses, have not been constructed in this manner. This can be an important factor on older greens which have been enlarged onto soil areas that were intended originally to be collar. Enlarging greens in this manner was fairly common because of demands of ever-increasing play on small greens. As a result, unmodified soils which were never intended for anything but collars now have become part of the green. This makes putting green and collar maintenance even more difficult.

This all means that the collars on courses with heavier claysilt soils tend to hold water so tenaciously that very little is available to the grass's roots. The turf on the green can be in excellent condition, while the collars have thoroughly wilted out. This situation is a particular problem in areas of the country where collars containing heavy soil, are compacted, and contain such high percentages of annual bluegrass, that they can die.

Stanley J. Zonzek

Director, Northeastern Region, USGA Green Section

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CONTROL OF CREEPING BENTGRASS IN TURFGRASS

Creeping speedwell (**Veronica filiformis**) has recently become an important lawn pest because it is competitive in well-maintained, irrigated lawns and golf courses. While its spread is more rapid in shade, it can survive and spread in sunny areas as well. Creeping speedwell spreads by both seed and vegetative parts. During cool weather of spring and fall, cuttings are dragged by the mower to new sites where they easily root when in contact with the soil.

Creeping speedwell was introduced into the United States as early as 1930 as a rock garden plant because it had an attractive blue and white flower. Subsequently, it escaped into adjacent lawns. Although a somewhat localized problem, it is considered serious because of (1) its disease susceptibility, (2) lack of tolerance to extreme environments, and (3) general disruption of lawn uniformity. Most major metropolitan areas have at least one older subdivison densely infested with creeping speedwell. Often the origin of the weed in a locale can be traced back to a single homeowner who imported the weed.

Creeping speedwell is tolerant of 2,4-D, and has varying degrees of tolerance to silvex, MCPP and dicamba. In the 1950's, 1 pound per acre of endothall was found to control creeping speedwell. Higher rates were too toxic to desirable grasses while lower rates were not effective in controlling the weed. However, endothall treated areas were often reinfested within two years.

Since creeping speedwell may cover 80 to 90 percent of the area, chemical control measures must include methods to reestablish desirable turfgrass species. Recently, Dacthal (DCPA), Roundup (glyphosate) and Atrinal (HLR Sciences) have been found to effectively control creeping speedwell.

If site examination indicates insufficient desirable turfgrasses present for reestablishment, Roundup can kill both creeping speedwell and turfgrasses, but will allow reseeding of the treated area soon after application.

Atrinal has been used as an experimental chemical growth retardant of turfgrasses as well as for selective control of creeping speedwell. In areas where creeping speedwell covers 80 percent or more of the surface, Atrinal inhibits rather than encourages remaining turfgrasses to fill in areas left vacant by the pest. Thus the role of Atrinal in controlling creeping speedwell would be in areas where pest density is 50% or less.

Dacthal is normally used as a pre-emergence herbicide for annual grasses. Surprisingly, it also is an effective herbicide in turfgrass for the selective post-emergence control of creeping speedwell. Dacthal is advantageous because it can kill creeping speedwell, prevent the establishment of annual grassy weeds, but allow perennial turfgrasses on the site to grow and spread throughout the treated area. Chemical treatment of creeping speedwell is most effective when the plant is actively growing, usually in the spring or fall.

In research trials, granular formulations of Dacthal did not control creeping speedwell, indicating that Dacthal must be applied to and absorbed by the foliage. Both the wettable powder and the flowable formulations were effective.

Following application of Dacthal, the visual appearance of the lawn is improved. Creeping speedwell, normally yellow-green in color, will darken and blend better with the turgrasses. This symptom remains for 4 to 5 weeks. At the end of that period the creeping speedwell begins to curl, wilt and disintegrate. At no time does the pest turn the yellow or brown

color that is commonly associated with herbicide injury.

Dacthal applied on creeping speedwell at the recommended rate and time for pre-emergence crabgrass control in the spring has been found to control both pests very effectively. Fall treatments of Dacthal may not kill creeping speedwell until the following spring. The pest may still appear dark green and healthy at snowfall but will simply be non-existent after the snow melts. The fall treatment has been used very successfully on golf courses since at no time does the golfer notice adverse symptoms.

John E. Kaufmann Michigan State University



Dear Ray:

I have just had the pleasure of reading your February 1983 issue of **The Bull Sheet**.

You put out a terrific publication! It is truly attractive and packed with information pertaining to golf course maintenance and golf course development.

It occurred to me you might be interested in my comments concerning golf course development in 1983 - see page 9 in the enclosed January issue of NGF's Golf Market Report. You are free to use any part or all of it if you so desire in **The Bull Sheet.**

Hardly a day passes that I don't receive calls or letters requesting assistance in golf course development.

Enclosed are copies of NGF Information Sheets GC-1, GC-2 and GC-34 which I send gratis to everyone asking for assistance in building a golf course. Thought this might be of interest to you.

Keep up the good work Ray. It's been much too long since we have had a visit.

Harry C. Eckhoff, Director Golf Facility Development National Golf Foundation

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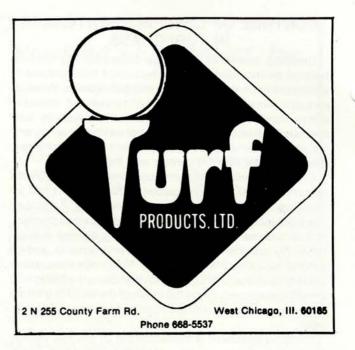
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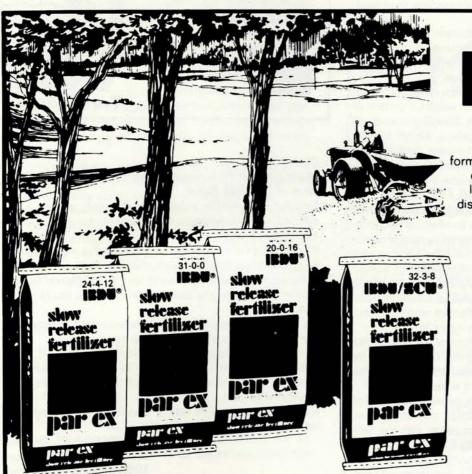
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A TERSAN 1991/Daconil 2787 tank mix will give you consistent performance against brown patch and dollar spot-the two most troublesome diseases on turf each summer. You'll also get strong action on leaf spot and other important diseases. It's the kind of performance superintendents depend on when a quality course can't be compromised.

diseases.

Tank mixing brings other advantages, too. With TERSAN 1991 in your tank, you get systemic action for protection from within the turf plant. Disease control is longerlasting and is less affected by rainfall or frequent irrigation. Tank mixing fungicides with different modes of action also reduces chances of benzimidazole resistance. You help insure the long-term effectiveness of TERSAN 1991 in your disease control program.

This year, plan on using TERSAN 1991 in combination with Daconil 2787. It's the tank mix turf diseases can't match.

