Turf Roundup of 1952

By FRED V. GRAU Director, USGA Green Section

(Concluding Installment) Clover Control

From our standpoint, observing results in the field, the best clover control in fairways and lawns has been accomplished by the use of 2,4-D and 2,4,5-T combined. We saw a great deal of this work in the Midwest, where it was successful with practically no damage to the existing turf grasses, such as they were. Apparently this combined treatment of 2,4-D and 2,4,5-T appears to satisfy the requirements of clover control on large areas in the Midwest. In the Northeast considerable attention has been given to the use of Endothal. A special memorandum was developed to warn users against the mixture of Endothal. Apparently the range of tolerance is rather narrow and an overdose may cause severe damage to the turf grasses.

People

We shall not be able to record in their entirety the changes in personnel in Turf Management in various parts of the United States. We will mention some of those changes that have been made known to us and that appear to have a significant effect upon the development of the National Coordinated Turf Program.

Col. R. H. Morrish, U. S. Air Force, will leave the Air Force as of November 1, 1952, to operate the business of the Noble Brothers Feed and Seed Company at Flushing, Michigan. He purchased this business and intends to devote his entire time to its prosecution. Col. Morrish long has been active in developing interest in Turf Management among the Armed Services. He has been more successful than most who have tried.

Dr. John C. Harper III is affiliating with the Division of Forage Crops and Diseases at Beltsville, Md., in late October. The USGA Green Section will have the opportunity to work closely with Dr. Harper. This is particularly pleasing because Dr. Harper received his degree under Professor Musser, working on the turf research fellowship established by the USGA Green Section.

Dr. James R. Watson, Jr., who was the first doctorate under the Green Section fellowship at Penn State, has left Texas A. & M. and is now employed by the Toro Manufacturing Company, at Minneapolis.

Marvin H. Ferguson, who left the Green Section on a leave of absence to go with the Military Air Transport Service, has could be renewed with very little trouble, left the MATS and is occupying the spot left by Dr. Watson

left by Dr. Watson.
Dr. Will Myers, formerly Head of the Division of Forage Crops and Diseases at Beltsville, has gone to Minnesota as Head of the Plant Breeding Department.

Dr. Kenyon T. Payne, well known in the Midwest as an officer in the Midwest Regional Turf Foundation at Purdue, has left there and is heading the Crops and Soils Department at Michigan State College, East Lansing, Michigan.

Ed. Merkle, who got his Master's Degree under Professor Musser through the West Point Products Corporation fellowship, is now at Scott Field, in East St. Louis, Illinois.

John Gallagher is busy working at his doctorate problem at Penn State and is giving Burt Musser a real lift. John is looking forward to the time when he will

have his degree and can go back to California to help develop the turf program. Fellowship at Penn State

Mr. Miles F. Nelson recently has been appointed to accept the Third Green Section Research Fellowship at Penn State, as announced by Dr. H. R. Albrecht and Prof. H. B. Musser. Mr. Nelson is a graduate of Wheaton College in Illinois and had been working for Prof. Musser during the summer. His interest in turf developed to the point where he wanted to work on the problem and Prof. Musser found that he had the necessary training and background to do so. His problem is to study the comparative effect of various soil aerating implements that relate to soil aeration, water penetration, root growth and other factors. The Green Section is supported in this fellowship by the Golf Association of Philadelphia, the Western Pennsylvania Golf Association, and Central Counties PGA.

Sodding

Sodding of turf areas has assumed a new and enlarged postion of importance in the turf field. Part of this is due to the fact that there is a good power sod cutter which not only can cut large areas of sod but which also eliminated the necessity for trimming the sod block by block, as it used to be done. Each strip of sod is already trimmed, ready to lay. A great many superintendents are hailing this as a big advance in their business. For instance, if an adequate sod nursery is provided, the entire surfaces of the tees

using a power sod cutter and employing conventional methods of rolling and laying. Many athletic fields will get a new face-lifting by virtue of the fact that the management of some athletic fields are recognizing the fact that they must develop a sod nursery to replace the center portion of the field when it becomes worn.

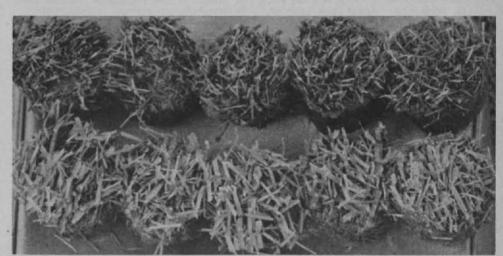
The method of cutting sod is receiving new attention. The new improved turf grasses knit together so tightly that it is not necessary to cut a thick sod. Sod that is cut very thin not only knits quicker after it has been laid but the area from which it was removed renews its growth and provides a usable sod again in the shortest space of time. In addition, a roll of sod cut thin is much easier to handle. In stripping combination zoysia-Merion bluegrass turf at Beltsville a ten-foot roll of sod cut with the Ryan power sod cutter as thin as it could be set could be handled easily by one man. There are not much data upon which to base recommendations for using sod but when the better turf grasses are used to grow the sod and the sod is cut with a power sod cutter, the moving and laying of sod becomes a relatively simple process.

The introduction into home lawns of sod of the superior turf grasses is a distinct possibility and will be expanded in the very near future. The plan to furnish to the home gardeners sods of the superior turf grasses is a distinct possibility and will be expanded in the very near future. The plan is to furnish to the home gardeners sods of the superior grasses; for instance, the combination of zoysia and Merion bluegrass for those who want it. Such sods would be laid on a prepared

seedbed, planted in nrmly until they knit, and kept mowed closely. Fertilizer of course would be used as required, also water would be used when needed to keep the grass alive and to keep it from burning up during a long period of drought. After the sod has knit, small pluggers would be utilized to move plugs to other places in the lawn. In effect the home gardener would purchase a ready-made sod nursery which would be his last expense except for his own labor in moving plugs of sod to other portions of the lawn and in refilling the holes.

Better Tees

Better tees are being provided for the golfers in a wide area from Philadelphia, Baltimore, Washington, to Louisville, St. Louis and Kansas City, through the use of adapted warm-season grasses. Two of the favorites are zoysia and U-3 bermuda. There have been some failures with these warm-season grasses but by and large the reason for the failures has been determined and they are not likely to occur again. One of the reasons was excessive winter play during the dormant period of these grasses. Apparently this cannot be tolerated beyond a certain degree, which of course must be determined more accurately through research. One of the plans which seems to be workable is to provide either two tees or a split tee whereby half of the tee is used during the winter with a heavy overseeding of a cool-season grass, or a tee composed en-tirely of cool-season grasses; the other tee or the other half of the tee would be the warm-weather tee composed of the warmseason grasses. We find that this practice is spreading and it seems to be entirely



-Grau photo

Top row — common Kentucky bluegrass. Bottom row — Merion bluegrass. April, 1952, Beltsville Turf Gardens, during an extremely heavy attack of Helminthosporium leafspot. This is combination zoysia-bluegrass turf. The common bluegrass was nearly destroyed.

practicable and workable.

The Green Section has mimeographed copies of the nation-wide Merion bluegrass survey conducted in 1952. The answers from the leading research people over the country are quite revealing. Copies of this survey are available from the Green Section office upon request, accompanied by a self-addressed, stamped envelope. The survey particularly has been useful to dealers to help answer many of the questions of their customers. It is planned to conduct similar national surveys with all improved turf grasses.

Golfdom carried an item on Delta bluegrass in the September issue. This item fairly well states the position of the research men across the country. For the benefit of readers of this Round-up we repeat that in most sections of the country data and observations indicate that Delta bluegrass seed will give approximately the same performance as will comman bluegrass seed.

In the St. Louis area there is some interest in Arboretum bluegrass — a type that was developed by the St. Louis Botanical Gardens. A small amount of seed is in existence but as yet Arboretum bluegrass has not been evaluated adequately. Based on our observations and tests we must say, until we know more about it, that Arboretum, too, will give approximately common bluegrass performance, particularly under the lower heights of cut which are tolerated by Merion bluegrass.

Wild White Clover

Sweeping claims are being made for an imported wild white clover in controlling crabgrass on lawns. Periodically the subject of wild white clover has been exploited but to date there is little evidence to support the claims that the sowing of imported wild white clover is the answer to crabgrass problem on lawns. A great many people will be disappointed. To our knowledge there is no research and there are no data to support the claims on this subject.

Soil Conditioners

The situation regarding the soil conditioners is most unfortunate. A great many people are buying various materials with little or no knowledge of what to do with them and how best to use them. As yet data have not been developed to enable people in research and extension to tell golf courses how to use soil conditioners most effectively. We feel that it will be two to four years more before we have many of the answers that we need to make sound recommendations. The picture is further confused by the development of many trade names and various percentages of soil conditioners, some are dry, some are wettable powders, and some

are liquids. How the home gardener or the superintendent is to sift the skimpy information and learn how to use these materials most effectively is beyond us. We do not doubt but that soil conditioners will have a place but the advertisements and the claims appear to be running far ahead of data and sound recommendations.

Extension Service Lacking

The greatest need in the immediate future is to maintain sound research programs and to amplify the Extension Service programs. Practical men in turf management need, above everything else, a source of information that is unbiased and quickly and easily available. In only one state do the turf interests have available to them Extension Service which is tax supported. In many cases Extension Service is not being used. In many cases Extension Service has nothing to offer the practical turf superintendent. Extension Service was developed to serve the tax payers because it is a tax-supported institution. The fact that Extension Service is not serving Turf Management in a great many cases is because the people in Turf Management have not made a unified request for the service from their colleges.

The void in Extension Service in turf is being met partially by industry. Industry is seeing the picture and is employing men who are trained in Turf Management. These men do not carry an order book but travel and visit in the interest of Service. They sell the name of their company and, through that, the products made by the company. It seems to be the trend (and we can look forward to more of this type of thing) if the Extension Service fails to recognize its duty and responsibility.

Poa Annua

It was rather dramatic that the main topic of conversation at the GCSA Conference in Columbus in February should be followed by such a wholesale disappearance of Poa annua over such a large portion of the United States. It seemed almost providential. On many courses where Poa annua normally would last through the summer, this year it failed completely. It has awakened everyone to the fact that this is one of the most unreliable of turf grasses. Where we attempt to use Poa annua as a cool-season companion to a desirable warm-season grass we find that even then it is undependable because it may come back in the fall if moisture is adequate or it may refuse to come back until the following spring when moisture becomes adequate. There are so many unknowns about Poa annua that there are many years of research ahead of us before we can either learn to destroy it or to use it successfully.

For the first time in several years be-

cause of lack of personnel the Green Section had to abandon its annual National Turf Field Day. This came at a particularly strategic time because so many USGA member clubs were in trouble. However, the attendance at field days in other parts of the country appears to be at an all-time high by virtue of the troubles involved and the new interests in new developments. The development of the National Coordinated Turf Program on a decentralized basis as developed by the Green Section starting in 1945 has, in a measure, made it unnecessary for the Green Section to maintain and develop National Turf Field Days.

A reasonable substitute was accomplished in 1952 when the turf research people from a wide area were invited to come to Beltsville to spend a day discussing research teaching and extension in turf as a guide for everyone involved. It was quite successful and more of this type of thing is planned.

Turf Cultivation

Superintendents everywhere are enthusiastic about the results of their aerifying programs. Many of them credit their aerifying procedures with their ability to hold turf through the severe periods of 1952. In some cases aerifying equipment has not entirely been successful, perhaps from the misunderstanding of the capabilities of the machinery and from an unwillingness to learn how to use the machines most effectively at the proper time and under the proper conditions. There is no doubt but that we can point to the development of soil cultivation as one of the most significant events in the history of Turf Management. It rates on a par

with the discovery of nothing else that we know of because soil cultivation and soil aeration had never been accomplished before the way it is being done today on thousands and thousands of acres of highly specialized turf.

Honorable Mention

This leads us then to the naming of the subject for special attention in 1952. We nominate for top honors the manufacturers and the users of soil cultivating and aerating equipment who have made such a significant contribution to America's turf in preventing runoff, in affecting more efficient fertilizer usage, in developing deeper and more extensive root systems, and in providing the users of the turf a more satisfactory playing surface. We learn from research conducted at Penn State under the West Point Products Corporation fellowship that soil cultivation under turf results in greatly increased water penetration and much deeper penetration of lime and phosphorous, which heretofore stayed in the surface for many years before it slowly worked its way downward. I can think of no other subject that is more worthy of being singled out for attention and special mention than this one. Congratulations to manufactures and users!

Green Committee Chairmen

The problem of shifting (not shifty) green committee chairmen every year is still with us. It is one of the principal problems of the golf course superintendent and one which keeps his position in constant doubt. It is a real pleasure to visit a course where there is a chairman-superitendent team of long standing. We have

(Continued on page 72)



Championship putting green turf. This is the combination of Arlington and Congressional at Wichita Country Club, Wichita, Kansas.

TURF ROUNDUP OF 1952

(Continued from page 56)

discussed this subject before and at length and we intend to spend very little time with it here. We want to say only that this problem is a real one and in 1952 green chairmen in some cases were responsible largely for the loss of turf. The reason back of it was the fact that they felt it their place to issue orders regarding the management of the turf rather than to assume their role of mediator and the representative between the board of directors and the golf course superintendents. We sincerely hope that this problem concerning the yearly changing of green committee chairmen can be solved on many courses.

No "Miracle Grasses"

The tendency of some writers to make it appear that there are "miracle grasses" is one greatly to be discouraged. We take the opportunity here to state our position clearly and unequivocally that there are no "miracle grasses." Each grass, regardless of how good it is, will fail unless it is handled properly. It is true that some grasses can tolerate more mishandling than can others but each has its specific requirements which must be met if it is to be used successfully on golf courses and other turf areas. Each grass has its advantages and its disadvantages and its limitations beyond which it can not go. These limitations may be due to geo-graphical distribution and climate. The Green Section hopes to be able to conduct national surveys on every turf grass so that it can have an accurate picture of the advantages, disadvantages, and limitations for the guidance of the people who sell the grasses and for those who use them.

Most golfers do not want to be educated particularly with respect to green-keeping matters. It becomes a highly desirable thing, however, in most cases to

inform the golfer as to the reason why certain things are being done on the golf course. Primarily they are being done for his convenience and enjoyment. Occasionally, however, the golfer is inconvenienced temporarily and that is a signal for the less stable golfers to "blow their top." The bulletin board in locker rooms is used far to little for timely notes informing the golfers of operations on the course and why they are being made. In many cases they object to aerifying, for example, because it temporarily disfigures the surface and they think that it



REAL ROLLING ECONOMY

Act fast to get those long stretches of fairway, greens, and clubhouse grounds in shape the easy way. The CON-SOL 1953 Power Roller has been completely redesigned for increased strength, longer life, improved performance and greater ease of handling — still at its same low price.

Weight is easily adjustable from 300-1200 lbs, to suit soil conditions, A caster-type roller, which may be used in place of the rear roller, is ideal for use around shrubbery plantings, or for use when the ground is very soft—available at nominal extra cost.

Write for literature, Dept G-2

CONSOLIDATED INDUSTRIES, INC.

West Cheshire, Conn., U.S.A.

SOFTEN YOUR GREENS AND TEES WITH Coarse UNIFORM SILICA AGGREGATE

(Free from packing fines)
SEND FOR SAMPLE FOR YOUR

GREENS - No. 816 TEES - No. 612 CONSTRUCTION - No. 612 TRAPS - No. 1220 or 1630

Priced in bags or bulk - Shipped by truck or rail

INDUSTRIAL SILICA CORPORATION

315 Stambaugh Bldg.

Phone 45125

YOUNGSTOWN, OHIO

interferes with their putting. If the job is done properly their putting should be exactly the same after the job as before the job. It is important to tell the golfer about what might happen, especially at the beginning of a season such as the one we have just had. Some superintendents were forewarned and posted on their bulletin boards what was likely to happen to their Poa annua fairways or to their Poa annua greens. Some were not so wise and the loss of turf during the summer caught the members quite surprised and literally speaking there was "hell to pay."

A golfer doesn't want to spend a lot of time being lectured to about greenkeeping — he wants to enjoy the course, but by the same token there are many of them who are sufficiently interested to want to know what is going on. Remember too that among the millions of golfers there is a very high percentage of those who own their own homes and have lawns which they would like to have as good as the best fairway turf. The Green Section hopes to make a determined effort to provide a central clearing house for lawn information as well as for golf course turf information. This is in recognition of the fact that most golf courses most

golfers also, have lawns.

The development of the National Coordinated Turf Program is bringing about





Inquiries for quotations and special analyses of grass seed are handled quickly. Any usual or unusual grass condition peculiar to your area may require a particular knowledge of seed habits based upon tests in different sections of the country. Our results of such tests are yours for the asking.

The larger users of lawn seed ASK WOODRUFF and rely upon Woodruff answers.

Dept. G2

F. H. WOODRUFF & SONS, INC.
Millerd, Conn.
Bellerose, L. I. Atlanta Sacramento



Arno

GOLF BALL WASHERS



GREENKEEPERS
PREFER ARNO
BECAUSE: IT
LASTS A LIFETIME. TARNISHPROOF ALUMINUM
ALLOY. NO PARTS
TO RUST. CANNOT
WARP, BEND OR
COME LOOSE.

COMPLETE WITH TOWEL-HOLDER. SERVES AS PERMANENT TEE MARKER. EASILY MOUNTED ON STANDARD ONE INCH PIPE.

LIMITED DEALERSHIPS OPEN
THE ARNO GOLF BALL WASHER CO.

GARRISON — MARYLAND

PHONE PIKESVILLE 3800

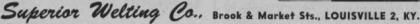
A New, Sure-Fire Pro Shop Seller IRON HOOD COVERS

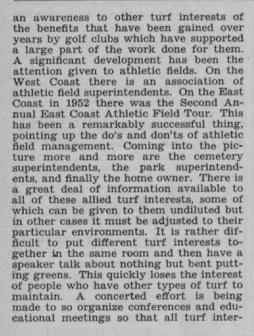
Now — you can offer your players the same protection for their irons as they have for their woods. Lightweight, water-proof leather. On or off in a jiffy and each hood plainly numbered. Every set of irons in your bag racks represents a prospective sale. Here's a new pro shop item that's really going to move. Better order — today.

These sets are available in six different colors, Red, Blue, Green, Black, Fawn and Gray. Numerals are embossed with 24 carat gold leaf.

Set of 8 retails at \$3.50. With wedge hood included — \$3.95
Usual golf professional discount.

Display them on a set of irons and watch them sell.







ests can be served with the minimum of confusion.

Industry Support

We wish to recognize here the tremendous support given to the National Co-ordinated Turf Program in all its phases by manufacturers of materials and equipment necessary in Turf Management. Nearly every research point in the United States has been the recipient of gifts or loans of equipment and other items from manufacturers which have helped in no small way to further the turf program. Without bequests such as these the Green Section, for example, would have been hard put to it to maintain its plots at Beltsville. Mowing equipment, aerifying equipment, and fertilizers, insecticides and seed have been given freely by the people who make or raise them. We want to express our deep appreciation, not only for ourselves but for the entire turf research field, for the help that has been given by you folks.

Summary

1. Golfer appreciation of turf management practices will promote good will through better understanding.

ASHLAND RUBBER TIRE TEE MATS

36" x 60" \$12.00 Ea. 46" x 60" \$16.00 Ea. Freight Prepaid

TIRE LINK MATS

Any Size — to your specifications — 66c Per Square Foot

RUBBER TEES

\$2.00 Per Dozen

Write for Illustrated Folder and Complete Information

ASHLAND RUBBER MAT CO. · ASHLAND, OHIO

- 2. The best turf receives "WATER WHEN NEEDED."
- 3. Are "24-hour jobs" in the best interests of golf?
- 4. One way to "beat the weather" is to have the right grasses.
- 5. Turf nurseries are "insurance policies." Is your golf course "covered"? A good nursery makes your course an "experiment station" too.
- 6. Turf Research in the United States is the strongest and best organized in history.
- 7. Resident Teaching and Extension Services need to be strengthened in order to keep the National Coordinated Turf Program in balance.

8. National coordination on a continu-

ing basis urgently is needed.

9. Increasing specialization and "multiple choice" in the tools of the profession make good training and adequate compensation mandatory.

10. Power caddie carts are marching forward inexorably. Turf to meet the new

type of traffic is needed.

11. Weeds are being met head-on with chemicals, better grasses, and better management.

12. The Green Section reaffirms its faith in the future with the Third Turf Research Fellowship at Penn State.



DUBOW OUBO

Symbol of Golf Club Excellence

JOCK HUTCHISON and BETTY BUSH
(Betty Bush, famous professional women's golfer, is
the newest member of our Advisory Golf Staff)
PRECISION-BUILT GOLF CLUBS
GRADUATED GOOSE-NECK IRONS
LAMINATED and PERSIMMON WOODS
COMPLETELY NEW

DISTINCTIVELY STYLED
For MEN and WOMEN GOLFERS

DUBOW H. C. — SUPER 803 COVER
GOLF BALL

The finest Golf Ball that can be made Write for descriptive folder and price list

J. A. DUBOW SPORTING GOODS CORP. 1905-13 Milwaukee Ave. Chicago 4, Ill.



WHEN YOU'RE REALLY FEELING SAD, BECAUSE YOUR GOLF GAME WAS SO BAD;

IF YOU'LL SLEEP AWAY YOUR SORROW, YOU'LL HAVE A BETTER GAME TOMORROW.

Golfer's Gopher, Davie Divot.... TO PEP UP THAT BIG ANNUAL CLUB EVENT ... ENGAGE

GOLF'S GREATEST SHOWMAN

For Booking Contact: BOB GIBSON 119 Lester Rd., Park Forest, III.



★ For the FINEST, LONGEST-WEARING and MOST ECONOM-ICAL Tee Mat on the Market! Nationally acclaimed by golf clubs and ranges as the best buy.

* SEND TODAY FOR LOW PRICES Merchants Tire Co., 2710 Washington, St. Louis 3

13. Combination turf (with warm-andcool-season grasses) continues to give outstanding performance under difficult soil, climate, and management.

14. High-quality sod for sodding and plugging is more important than ever.

15. The national survey on Merion bluegrass is the forerunner of more coordinated action.

16. Poa annua wasn't much of a "friend" in 1952.

17. Cultivation and combing are important aids in producing high-quality turf.

18. Other turf interests are beginning to appreciate golf for its contribution to their turf problems.

19. Without Industry Support the turf

program would lag. 20. There are no "miracles" in the business of producing Better Turf.

1953 TURF CONFERENCES

Feb. 8-13 - 24th Annual Turf Conference and Show of Golf Course Superintendents Association of America, The Ambassador, Atlantic City, N. J.

Feb. 16-19 - Turf Conference, Pennsylvania State College, State College, Pa.

Feb. 24-26 - Cornell Turf Conference, Cornell Univ., Ithaca, N. Y.

Mar. 2-3 - Turf Conference, Midwest Regional Turf Foundation and Purdue University, West Lafavette, Ind.

Mar. 9-11 - 19th Annual Superintendents and Turf Assn. Short Course, Iowa State College, Ames.

Mar. 11-13 - Minnesota Short Course, Curtis Hotel, Minneapolis, Minn.

Mar. 13-14 - Michigan Golf Turf Conference, Michigan State College, East Lansing.

Apr. 22-23 - Southeastern Turf Conference, Abraham Baldwin Agri. College and Georgia Coastal Plain Experiment Station, Tifton, Ga.

Oct. 21-23 - Central Plains Turf Foundation Conference, Kansas State College, Manhattan, Ks.



