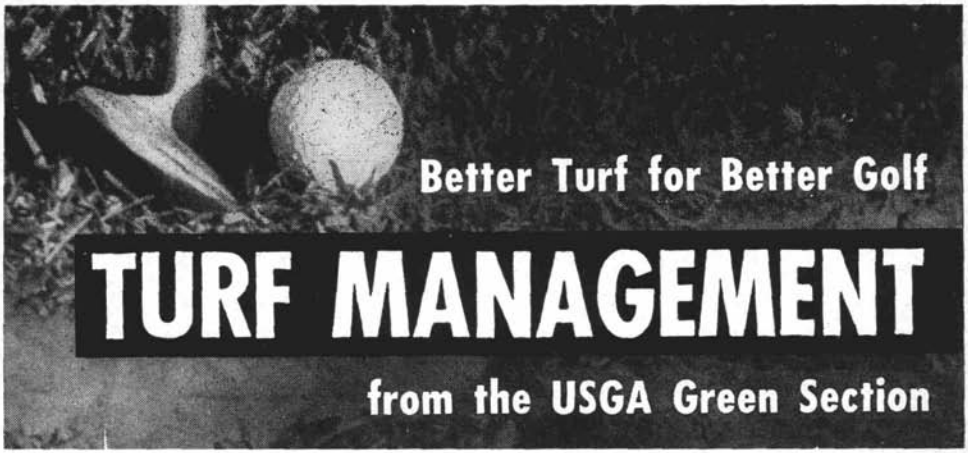

Correspondence pertaining to Green Section matters should be addressed to:
USGA Green Section, Room 331, Administration Building, Plant Industry Station, Beltsville, Md.

TURF MANAGEMENT HINTS FOR AUGUST

COMPILED BY THE GREEN SECTION FROM CONTRIBUTIONS FROM CO-OPERATORS IN THE NATIONAL CO-ORDINATED TURF PROGRAM

Watch for algae on poorly-drained turf areas where soil tends to be tight and compact. Open the soil by aerifying or forking to let air in. Dust the areas with hydrated lime, applied at about 2 pounds to 1,000 square feet. Use as little water as possible.

August is a good time in many areas during which to fertilize tees and fairways with high-organic fertilizer. Thorough aerifying just prior to applying fertilizer (or lime) will get the material into the root zone, where it belongs and where it won't wash away with the next heavy rain.

Start now to prepare a weed-free plot of soil for a turf and grass nursery, if you don't have one. By all means plant a plot of every new and promising disease-resistant grass you can procure, to see if it is good for you. Until you try it you will never know for yourself.

Have you talked with your extension entomologist recently about your insect problems? Remember that insect control is the first step in weed control. Turf which is damaged by insects can't fight weeds.

Turf Book Sales Good

The USGA-sponsored book, TURF MANAGEMENT, by H. B. Musser, is finding a place with superintendents, green committee chairmen, athletic field superintendents, home owners, and many other turf enthusiasts. Book sales have exceeded expectations and yet we find that many people who can use the book to excellent advantage do not have it or do not know about it. Landscape architects and landscape gardeners should have this book for reference because it refers intimately to every-day problems which these specialists encounter.

Your local bookstore may have it but if not, you may send your order directly to:

United States Golf Association,
40 East 38th Street,
New York 16, N. Y.

The price is $6.00, which should be included with the order.

It is time to plan your fall program of crabgrass control, particularly to stop seed production. It is not necessary to achieve 100% kill of existing crabgrass plants so long as no seed is produced. At this time of year sodium arsenite and p. c. (potassium cyanate) are favored materials.

Mechanical control of crabgrass is becoming more popular. Many superintendents report no crabgrass problem since using flexible combs on fairway mowers.

Will You Be Among Them This Year?

Plan now to attend the 1951 National Turf Field Days at the Plant Industry Station, Beltsville, Md., October 7-9. This is the group that attended 1949 Field Days. In background is Administration Building, new home of Green Section offices.

The use of the most disease-resistant grasses that are tolerant of close mowing is still the best way to control weeds and to have Better Turf.

Aerifying wet soils to let air and moisture out is a good use of this equipment. Keep spoons clean and keep hollow tines open for most effective results. Plugged equipment is inefficient.

Cool-Season Grasses

August is considered a good time to seed superior cool-season grasses into warm-season turf. If you must still use ordinary cool-season grasses it will be best to wait about another month.

Fall renovation of unsatisfactory turf should begin in August. Sodium arsenite and thorough aerification are two basic considerations as well as the introduction of a better grass.

Water control and occasional use of hydrated lime (2 pounds to 1,000 square feet) may be as effective as fungicides on putting green turf during hot, muggy spells in August.

Frequent light sprinkling is bad for lawns but good for crabgrass. Deep soaking at maximum intervals is a sound principle on any turf.

Stinkworms, if you have them, are most active in hot weather. Chlordane is a recommended material for their control.

Notice how earthworm casts in fairway turf are pasted down when wet? Many times the turf is killed under the "button" and a bad lie results. Chlordane controls earthworm casts for $10 to $12 an acre.

Fall treatment of broadleaf weeds with 2, 4-D is good practice. Remember how we used to lose balls under plantain leaves?

Clover can't stand repeated light doses of sodium arsenite, which also checks many insects. Endothal, a new chemical, is being tested for clover control and shows promise.

Twenty years ago this July 4 past, a young man from Nebraska came to work for the Green Section as a student assistant to start work on selective chemical weed control and to help edit The Bulletin of the USGA Green Section. His name is Fred V. Grau.

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20 Years Ago

A quotation, in part, from The Bulletin of the USGA Green Section, Vol. 11, No. 8, August, 1931, p. 154, "Moisture Requirements of Grass . . ." reads:

"Only a part of the rainfall can be used by plants. Some of it runs off the surface without entering the soil where roots may reach it. The loss through run-off is often considerable when a large amount of rain falls in a short time. A quick, hard, dashing rain has the effect of packing the soil at once, thus increasing the run-off, erosion, and loss of plant foods by washing, as well as removing valuable organic matter. A hard rain leaves the soil in such a condition that, upon exposure to a drying atmosphere, it bakes and cracks and causes water to be rapidly lost by evaporation, which is of much importance, especially in a hot, dry climate. A gentle slow rain causes no run-off and consequently a greater part of it is absorbed into the soil and becomes available to plants."

Readers will notice that in no part of the entire article was aerification mentioned as one way to conserve rainfall. The article, in a large measure, was prepared by Fred V. Grau. How times change!

In The Bulletin of the USGA Green Section for August, 1931, F. E. Staebner, USDA Drainage Engineer, in his article, "Suggestions on Installation and Use of Fairway Sprinklers", said:

"Where fairway irrigation is undertaken, it is desirable that special labor be employed and the watering be so planned that when one spot gets watered it is thoroughly wetted. After that it should not be watered again for several days, as a general rule. A good watering about once a week should carry most turf through continuous drought in fine condition, except on the loosest of sandy soil or in the case of some special condition, such as a very thin soil directly over rock. Under such unfavorable conditions an irrigation once in three or four days is permissible; but whenever grass is being watered it should be given sufficient water to carry it to the next scheduled watering. The above rules may also be applied to the irrigation of putting greens and teeing grounds if begun on that basis in the spring of the year. It is quite possible, however, that the nature of the grasses usually used on putting greens and teeing areas may be a special watering problem. Because of their apparent inclination to a short root system, it may be necessary to shorten the period between applications to even less than three days, but every effort should be made to reduce the frequency of watering to a minimum, and to increase the quantity of water applied sufficiently to carry the growth to the next watering. Changing to the above method in the middle of the summer after training the grass roots to frequent scanty watering is likely to be harmful."

It is obvious that many of the lessons spoken in the past have been ignored or forgotten, or they were not heard or read in the first place.

The August, 1932, issue of The Bulletin of the USGA Green Section was entitled, "Turf Diseases and Their Control." This is virtually a collector's item today. The Green Section still has a few copies left which are available to member clubs and to Green Section Service Subscribers at $1 a copy.

Keep Members Happy

Superintendents will do well to evaluate with care their Height of Cut in relation to play and satisfaction of members. Better to cut close and have happy members than "cut high to save the grass" and have everyone sore at you. The adapted grasses don't die when cut close for pleasurable golf.

Excerpts from The Bulletin of the USGA Green Section, Vol. I, No. 8, August, 1921:

". . . Dr. W. S. Harban was the first golfer who went to the U. S. Department of Agriculture for technical assistance in regard to green turf problems. This was in 1906, when he first met Messrs. Piper and Oakley . . ."

"The committee pointed out that about $10,000,000 a year was being spent on the establishment and maintenance of turf by golf clubs, and it was believed that through ignorance half of the money was wasted." We wonder what the figure would be today.

". . . the ravages of brown-patch disease on fine putting-green grasses . . . characterized as the most serious problem that confronts the golf courses of the United States . . . The ideal thing is to find a grass which will make a good putting surface and that is immune to the disease.

"There are numerous requests from golf clubs for visits to advise them in reference to their turf problems. At the present time such requests cannot be fulfilled, excepting as a member of the Committee may chance to be in the place. It would be highly desirable if the Green Section could afford the services of one or more competent specialists

to travel and to assist golf clubs in reference to turf matters, but this is out of the question until its revenues are far greater than at present . . .

"Until the Green Section enrolls every golf club in the United States, it cannot exert its greatest influence. It is recognized that many of the clubs are poor financially, but even so we believe it will be true economy for them to join the Green Section. Manifestly we must make every reasonable effort to secure the enrollment of each golf club, for every one of them has something to teach the rest of us as well as much to learn."

Superior turf grasses are characterized by their ability:

1. To thrive under close mowing.
2. To be highly resistant to diseases.
3. To form the type of turf that makes the sport more enjoyable.
4. To provide excellent turf even when very dry.
5. To heal injuries rapidly.

Other considerations might be listed but these are held to be of greatest importance.

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Green Section Office Moves

Reorganization and personnel shifts at the Plant Industry Station, together with a request by the Green Section for more office space, have resulted in a move during the week of July 4 from the South Building to the Administration Building. The new room number is 331, Administration Building. The telephone number remains the same—Tower 6400, extension 277.

Dr. Grau now has a private office instead of being crowded into one room with three others. His room is 331-A. Mrs. Drennan will receive callers in 331 and will handle all phone calls. Mr. Williams will be in 329, and Agronomists Wilson and Radko will occupy 327. We appreciate the additional room but we shall miss the close association with Forage Crops and Diseases, with whom we continue to co-operate closely, as in the past.

We hope that our friends will come to see us in our new quarters. When you write, don't worry about room numbers — just address us:

USGA Green Section
Plant Industry Station
Beltsville, Md.

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BROWN PATCH OBSERVATIONS ON BENTGRASSES

ABSTRACT FROM ARTICLE BY JOHN B. ROWELL, PLANT DISEASE REPORTER, MAY 15, 1951

Wounds produced by the frequent mowing of bentgrass greens and the guttation drops produced on the tips of the grass blades are important factors in the development of brownpatch (*Rhizoctonia solani*), according to research findings by Dr. Rowell at the Rhode Island Agricultural Experiment Station.

Critical greenhouse studies which included inoculation with *R. solani* in a moisture chamber under favorable temperatures (75° to 85° F.), showed severe brownpatch injury on the cut bentgrass while the uncut bentgrass remained relatively free of infection. The fungus was observed to originate at the tip of the cut blade and progress downwards towards the center of the plant.

Guttation drops appeared to be a second important factor in contributing to the rapid spread of brownpatch. These drops occur mainly when the roots absorb water rapidly and the rate of transpiration is reduced. Such conditions are pronounced during hot, humid weather, when the sky is overcast and wind movement virtually is non-existent. Under these favorable factors the guttation drops may persist throughout the daylight hours. The drops contain dissolved salts and organic materials which serve as an ideal cultural medium for development of the disease. All severe brownpatch infections observed in these studies occurred when the turf was moist with guttation drops.

Golf course superintendents long have known that poling and hosing the greens in early morning are of definite value in