

# UNITED STATES GOLF ASSOCIATION GREEN SECTION EASTERN REGION

NORTHEASTERN DISTRICT  
RUTGERS UNIVERSITY  
NEW BRUNSWICK, NEW JERSEY

MID-ATLANTIC DISTRICT  
PLANT INDUSTRY STATION  
BELTSVILLE, MARYLAND



## EASTERN TURFLETTER

ALEXANDER M. RADKO  
EASTERN DIRECTOR

CHARLES K. HALLOWELL  
MID-ATLANTIC DIRECTOR

T. T. TAYLOR  
NORTHEASTERN AGRONOMIST

No. 4

October, 1957

### THE SUMMER OF '57

This summer several Mid-Atlantic and Northeastern States suffered one of the severest droughts of all time. Federal aid was sought by several states; conservative Massachusetts hired a Rainmaker; editorials appeared daily describing droughty conditions; and the New York TIMES of September 4, reported that the months of May to August were New York City's driest in 131 years. The City's Weather Bureau searched data as far back as 1826 to back its report of the severe drought, record-wise; golf-wise, records do not go back that far, but many an "old timer" in the turf game has said that the '57 summer was the driest in their long experience.

#### SOME OBSERVATIONS ON THE DROUGHT AND UNWATERED FAIRWAY TURF

All plants require a certain amount of water to sustain life — this we know, and grass plants are no exception. Just how much water is required weekly depends on many inter-related factors: soils, types of grasses, topography, fertility program, drainage -- to mention a few -- along with climatic factors.

Yet despite very little help from Mother Nature, unwatered permanent grasses miraculously survived this extreme drought, although admittedly the turf thinned considerably. As a result of the thinning of permanent turf, and the loss of Poa annua in unwatered fairways, the inevitable weed problem ensued.

The most troublesome weed this summer season without question was knotweed, which always seems to do its best when the going is toughest. The drier and harder the soil becomes, the better knotweed thrives, and these vine-like plants harassed many a golfer and golf course superintendent this year.

Silver crabgrass was also more troublesome this season, but common or hairy crabgrass were not overly abundant on dry fairways. However the usual broadleaf weeds, dandelion, dock, plantain, and chickweed made headway this season. During normal seasons, most weeds can be eradicated in routine fashion by superintendents. However, during this severely dry early fall season, few, if any, had the courage to tackle the weed problem with soil moisture at so critically low a level.



Of the weeds mentioned, chickweed is one that could be treated in late fall - early winter period, as it makes strong growth if weather is mild. We refer you to your Eastern Turfletter (Vol. 2) for control measures for chickweed.

#### High Weed-Seed Set

Since many superintendents elected not to risk herbicide treatment, other expedients were used in the attempt to keep the seed set under control to some degree.

Some superintendents used the Scotch harrow, some used straight discs, others used combs before mowing in the attempt to keep individual plants from spreading too vigorously. There is no question but that these measures were helpful, however they are not as effective as chemical control. As a result, seed set was heavier than it normally should have been, and it appears that one of the major problems for the next year or two is going to be fairway weed control.

#### SOME OBSERVATIONS ON THE DROUGHT AND WATERED FAIRWAYS

Two things were sharply pointed up during this season: first, a great deal of renewed interest in the installation of fairway watering systems; second, the inadequacy of many watering systems. Insufficient supplies of water, poor pressure, and small water lines were among the more important deficiencies. Many golf courses depend on city water supplies, several of which were rationed, and allowed use of water only for two hours a day. Needless to say that fairway watering systems were idle during this period of water rationing, and greens and tees were watered as best as possible.

Moral: If you are thinking of a fairway watering system, make sure that you first have an adequate supply of water at your disposal.

How much is an adequate supply? As mentioned previously, this depends on a number of inter-related factors. However we can say this, one 18 hole course in Northern Jersey on clay soil used  $7\frac{1}{2}$  million gallons this year; while another on sandy soil on Long Island, used 23 million gallons over the season.

To evaluate or improve the present system, or to obtain information about irrigation systems, we believe it best to seek the aid of irrigation specialists in Extension Service at State Agricultural Colleges, or at one of the many commercial firms specializing in the field of golf course irrigation.

We also suggest that you obtain reading material on the subject of water requirements for turf areas such as Dr. Robert M. Hagan's article, "Know How to Water", which appeared in the February, '53 issue of the U.S.G.A. Journal and Turf Management.

#### SOME OBSERVATIONS ON THE DROUGHT AND PUTTING GREENS

This can be summed up briefly: Greens generally fared well because the only water they received was that applied by artificial watering. Humidity was low, therefore diseases minimized. Greens containing soil layers were not troubled, as they normally are in wetter seasons. When you are in control of water applied to greens, fewer troubles develop.



#### OTHER OBSERVATIONS

1. Poa annua fared very poorly, as expected, on unwatered areas.
2. Where Poa annua went out, knotweed encroached and a good amount of reseeding and renovating was done after mechanical treatment for knotweed control mentioned above.
3. Kentucky bluegrass was the first of the permanent grasses to revive on unwatered fairways.
4. Matted bentgrasses in fairways suffered severely, and revived slowly.
5. Sodwebworm and cutworm activity was very high and extended over a longer period; chinch bug and grub activity was lower than expected.
6. Turf is a Tough Commodity! Though unwatered fairway permanent grasses were brown and soils were powder-dry, the roots somehow managed to survive.

#### U.S.D.A. 1957 YEARBOOK ON SOILS

The U.S.D.A.'s 1957 Yearbook entitled "Soils" is hot off the press. It contains 88 chapters written by 142 scientists, and indeed should be an important addition to every superintendent's library.

Copies of this book may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for \$2.25.

#### WINTER SCHOOL FOR TURF MANAGERS REACTIVATED

Dr. Eliot C. Roberts recently announced the reactivation of the University of Massachusetts' Winter School after suspension of one year. This course was started 31 years ago by Professor L. S. Dickinson.

Enrollment is limited to 25 men, it starts on January 13, is open to all interested in the turf field, and a small tuition fee is charged. Persons interested should contact Dr. Eliot C. Roberts, University of Mass., Amherst, Mass.

#### CONFERENCES

PLAN TO ATTEND THE NATIONAL TURFGRASS CONFERENCE AND SHOW SPONSORED BY THE GOLF COURSE SUPERINTENDENTS ASSOCIATION OF AMERICA -- FEBRUARY 2-7, 1958, SHOREHAM HOTEL, WASHINGTON, D. C.

Since the Mid-Atlantic Golf Course Superintendents Association is host to the National Meeting, there will be no Mid-Atlantic conference at Baltimore this year. The Mid-Atlantic Group has granted to those who normally attend their fine turfgrass conference a leave of absence to attend the National.

ONE WEEK COURSE IN TURF MANAGEMENT, January 20 - 23, 1958  
Rutgers University, New Brunswick, New Jersey

# Eastern Turfletter

USGA GREEN SECTION

BULK RATE  
U. S. POSTAGE  
**PAID**  
PERMIT NO. 366  
NEW BRUNSWICK, N. J.

MR. WILLIAM BENGUEYFIELD  
U. S. GOLF ASSN. GREEN SECT.  
13267 VERANO ST.  
GARDEN GROVE, CALIF.