UNITED STATES GOLF ASSOCIATION GREEN SECTION EASTERN REGION

NORTHEASTERN DISTRICT

RUTGERS UNIVERSITY NEW BRUNSWICK, NEW JERSEY

MID-ATLANTIC DISTRICT

711 WEST AVENUE JENKINTOWN, PENNSYLVANIA



EASTERN TURFLETTER

ALEXANDER M. RADKO

CHARLESK, HALLOWELL

RAYMOND E. HARMAN NORTHEASTERN A GRONOMIST

No. 4

August 1961

THE HEAT'S ON!

"The happiest people are those who are too busy to be unhappy" ... so goes the old quote: Well, there are few busier summer workers than those whose profession is to maintain and manage turf grasses for golf. In summer, golf course men in many ways resemble the popular "one-armed paper-hanger"...they have numerous details to take care of ... some minute... some rather sizeable... but all exacting! For these busy men, their real barometer for happiness is the appearance of "their" golf course... You can almost guess the condition the course is upon arrival when you step up and shake hands with the man in charge.

There are numerous obstacles in the path of happy turf, and happy superintendents. Some of the more important ones...diseases ...wilt...scald...weeds...heavy soils...thatch...human error... grain...compaction. To state them is simple, but the diagnoses, the causal ramifications, and the corrections for each are not so simple to come up with...especially when these problems are compounded ... i.e. disease on wilt ... disease on disease ... me chanical injury on wilt...weeds in a new seeding...etc.

Let's examine the problem of SCALD ... which is also defined sometimes as <u>WET WILT...a</u> problem which is prevalent in areas of this region at this writing. Scald occurs when we have a supersaturated condition of the soil, followed by high temperatures and high humidity. This Spring season was very rainy and soils have been too wet right along ... then came occasional very heavy rainfalls in mid-July followed by high temperatures and high humidity.

Under these conditions, the soil moisture and the moisture in thatch begin to heat up (Superintendents will swear it begins to BOIL) and the oxygen supply is cut-off...grass roots are standing in water and cannot function properly...they cannot breathe, so

they become limp and discolored and if not recognized quickly as a condition of scald, then the grasses will die.

A symptom that usually accompanies scald is the scalping of greens...the soils are soft and grasses are puffy...and the mower sinks into the turf and cuts lower than it normally would.

What is the correction required to keep the grasses from dying when injured by scald? As contrary as it sounds, the first thing to do is to apply water...just a little bit...a showering or syringing of the turf...regardless of time of day or whether or not the sun is beating down on the turf. Oft-times a member of the Greens Committee will be concerned that watering while the sun is beating down on the turf is detrimental. It is not the time of day, but how much water is applied that is important!

Yes, it is necessary to syringe or shower the turf several times daily--and this is to COOL THE TURF...by cooling the turf, we slow down its rate of respiration...and by doing so, we reduce the urgent need for oxygen...also, there is some oxygen forced through the blades when syringed...and so the loss of turf is minimized.

What other things must be done at the time of SCALD?

- (1) Aerate the most troublesome greens...those which are poorly drained or have heavy soils...those on which the turf cover has thinned or has become entirely brown.
- (2) Apply some hydrated lime at the rate of 1/2 to 1 lb. per 1000 sq. ft. This is best applied in the evening as a dust or a light spray...and allow it to remain on the grass blades overnight ...then syringe it in lightly the next morning.
- (3) Keep up the preventative schedule of disease control... because when conditions are right for scald, they are also right for disease invasion.
- (4) Continue to syringe greens several times daily, but be careful not to apply too much water!
- (5) Be sure to apply some insecticide to aerated greens... aeration holes are custom made homes for the cutworm and sodwebworm.

There are some side effects of conditions right for scald... and these are--

- (1) Grasses take on a PUFFY growth--grainy grasses look granier...and look oily or water-logged.
- (2) Saturated soils are SOFT...they permit the mowers to "dig-in" and scalp the turf badly.
- (3) Algae (black scum) forms on the surface and smothers the grasses.
 - (4) PUFFY grasses are easily bruised.

What are some of the factors that determine the severity of SCALD? Poorly designed greens...poor internal drainage of soils... no tile and heavy soils containing a high percentage of silt or clay...heavy thatch...poor surface drainage...poor air drainage—to mention a few.

Greens in a "pocket" surrounded by heavy underbrush and trees ...greens built in low areas where humidity is higher than on other greens. This is why it is often recommended that trees and underbrush be cleared in the direction of the summer wind (Southwest) to improve air drainage over the green.

FIELD DAYS

August 9 - - Rutgers University

August 23 - - University of Rhode Island

September 6-7 - - (noon to noon)
Pennsylvania State University

1961 Yearbook of Agriculture entitled "SEEDS" is now available. The book is distributed mainly by members of Congress. It is also sold through the Supt. of Documents, Government Printing Office, Washington 25, D. C.

Eastern Turfletter

USGA GREEN SECTION

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

Dr. James Watson Research Division Toro Manufacturing Company 82nd & Lindale Minneapolis, Minn.