

Repelling with Water: A method that has some times been used effectively is that of driving ants from greens by leaving sprinklers running all night for several nights in succession. The ants dislike this excess water and will leave the greens. Because of the danger of complications due to excess water on heavier soils this method can only be recommended for greens with excellent drainage and sandy topsoil.

Tobacco dust and other repellants have proved to be effective under certain conditions. However, like the watering method, these remedies are only partially effective since they merely cause the ants to move out to new territory, from which they migrate back onto the greens as soon as conditions are again favorable.

Warning: The poisons listed above (except pyrethrum extract) are extremely poisonous to human beings and animals. Extreme care should therefore be exercised in their preparation, use and storage. The sirups especially should never be left where they may be reached by small children.

UNUSUAL WEATHER CONDITIONS IN 1936

Greenkeeping practices must always be modified in conformity with the prevailing weather conditions. Many golf course officials have for years been hoping for some standardized golf course maintenance methods. It is impossible, however, to standardize greenkeeping methods until someone develops a system of standardizing the weather. In the maintenance of grass, allowance must be made for not only the weather conditions prevailing at the time but also for unusual weather conditions of previous months, as well as anticipating possible extremes in the months to come.

The season of 1936 started with a variety of unusual conditions that have already had a decided influence on golf course turf and will no doubt influence turf culture throughout this summer.

The long, cold winter with plenty of snow, followed by a cold, wet spring, in many parts of the country resulted in severe damage from snowmold and winterkill. In many sections of the country the growth of turf; particularly annual bluegrass, was stimulated in early March by early spring thaws and in some places was completely killed by cold weather later in the month. The result was that large areas of golf course turf were destroyed and the cold weather that followed the seeding of these injured areas resulted in slow germination. The seedlings in these large areas, whether they are from seed that was sown in the soil this spring or from seed of Poa annua already in the soil, are faced with the possibilities of extremely hot, unfavorable weather before they are well established. This circumstance therefore will continue to threaten through the summer. Excessive fertilizing and watering to speed up the growth of grass in these weakened areas at this late date may only make conditions worse if early summer weather conditions prove unfavorable.

As an example of the extreme weather conditions that prevailed in the early part of 1936, the United States Weather Bureau has reported that in Oklahoma, for instance, the 111 days from January 1 to April 20 had approximately one-fifth of the normal rainfall for that season. This represents the smallest amount of rainfall that is on record for that period in Oklahoma. The driest previous record for a similar period was in 1910, which had, however, 60 per cent more

precipitation than was recorded in 1936.

During that same interval the Kansas weather bureau records showed less than 30 per cent. normal rainfall, which was the lowest on record. Missouri likewise had the driest similar period since records have been kept. Texas in that same interval had only 40 per cent. of its normal rainfall.

While the above States were scoring weather bureau records for dryness, many of the Eastern States were setting flood records. The average rainfall; for instance, in Pennsylvania for the month of March was nearly 7 inches, or about 30 percent. more than the previous high record. New York, West Virginia and Virginia each had the second heaviest rainfall on record for March.

In regions having excessive rainfall during the spring months, golf course turf is likely to be shallow rooted and therefore more apt to be severely injured by hot, dry weather in early summer. Where turf is watered, more care must be exercised to avoid excessive drying of surface soil if there is a shallow root system than if conditions have been favorable for the development of deeper root systems. Also, it is especially important under such conditions to control attacks of turf diseases promptly to avoid extensive damage, since grass with a shallow root system will not recover as rapidly from such attacks as will turf with a better root system.

MR. NORTH JOINS THE GREEN SECTION

The Green Section is glad to announce the addition to its technical staff of Mr. H. F. A. North, who during the past 6 years has been conducting experimental work with grasses and turf at the Rhode Island Agricultural Experiment Station. Mr. North is a graduate of the Iowa State College and later did graduate work and served on the staff of the West Virginia University. Since going to Rhode Island in November, 1929, he has devoted much time to the study of velvet bent for turf purposes. This study included not only the comparison of the best strains of velvet bent in turf but also a study of the possibilities of each strain for seed production, with the view to making a dependable supply of seed of these grasses available on a commercial basis. His work in Rhode Island also included a study of fertilizers for turf purposes as well as observations on the control of diseases and insects.

In connection with the experimental work at Rhode Island, Mr. North visited a large number of clubs in the New England district and became thoroughly familiar with the golf course turf problems in that region. For the past two years he has been Secretary of the Rhode Island Greenkeepers' Club.

Mr. North will be located at the Green Section headquarters in Washington and will continue his turf investigations at the Arlington turf garden as well as take part in the technical advisory service of the Green Section.