Fertilization

By ROBERT J. HAYES

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THE purpose of such gatherings as these is to consider the various changes taking place and which materially concern us as members of a profession maintaining, developing and caring for golf course turf.

ROBERT J. HAYES
Greenkeeper at the Pelham (N. Y.) Country Club, one of the most prominent golf clubs in the Metropolitan district.

Greenkeeping as a profession is being more and more recognized as one where practical experience and thorough knowledge of one's job counts, in order to succeed. It is my desire to stress this particular point at this time when like many other types of business and professions we are affected by this period of depression. Many of you realize that a great deal more is expected and demanded from the greenkeeper now than ever before due to this condition.

We are coming to realize more and more the need for the exchange of ideas, seeking remedies for our problems and stressing every effort to procure the utmost and best results, for they are demanded of us. Therefore, to succeed, we must keep abreast of the times and the various changes taking place. We must also acquaint ourselves with the short cuts and new practices or methods being developed to make our job easier and better.

In the East the problems of many greenkeepers this past year have been most trying. It is therefore my desire to suggest some of the things we may do to help ourselves in these changing times.

The importance of knowing the condition of the soil where turf must be maintained cannot be too strongly considered and under such circumstances periodical soil tests should be made to determine what degree of acidity the soil is.

It is my opinion that many of our turf troubles are directly due to excessive accumulation of acids causing toxic conditions of the soil, retarding growth of turf, locking up necessary minerals for root growth, etc., thus depriving the grass of the necessary food elements. It can be reasonably determined that such conditions will affect the turf during the summer. Our soils in this vicinity are such types that need considerable watching and testing to overcome this trouble.

Acid soil not only deprives the turf of its food but retards the growth of many bacteria which are so necessary in the soil to change the ammoniates to nitrates so that the grass can take it up for blade or leaf growth.

Many of us must put up with Poa Annua, whether we like it or not, and where very acid conditions are evident, through tests, we run into difficulty trying to keep it in healthy, growing condition. This we have been told, is due to its need of a soil near the neutral point and favoring alkalinity. Being a native grass, where we must tolerate it, we must maintain it and my opinion is to give it attention prior to hot spells of summer.

POA ANNUA LIKES LIMESTONE

POA ANNUA responds to limestone treatment and it is my opinion where lime is applied in May or early June that it will respond to this treatment with healthier growth and greener color.

So much for testing soils. The next problem we have is feeding. Excessive amounts of food will do more damage than no food at all. Complete balanced food applied in the early Spring in combination with compost will amply repay their applica-

tion, and if again applied in the Fall will benefit the turf more.

Various formulas are recommended but a selection should be made to fit one's needs and requirements. I am convinced in maintaining my own course that limestone has its value and have, after making an application, noted its direct benefits and needs. Nitrogen may promote leaf growth, phosphorous increases the root system, potash furnishes the starches and brings the plant to maturity, but I am convinced lime is more important under acid or toxic conditions, than the three, for fertilizers cannot beneficially function if applied to toxic soil, and in some cases do more damage than good.

Turf that does not procure proper nourishment, or is in poor condition due to toxic or acid soil, will be affected by the various diseases we have to combat.

The misuse of many of the fertilizing elements, particularly the acid fertilizers, has given us no end of worry. Of course, we all know that moisture, top dressing and drainage are necessary, but proper feeding in balance will produce good turf through common sense application.

Then again grasses are like human beings and have their likes and dislikes as far as plant foods are concerned. Therefor we cannot take the word of others as to the merits of any product unless we are convinced of its value.

Changes are continually taking place, new improvements are being made, and each and every one of us must keenly watch these things for our own good. Our profession can and will be better recognized when we endeavor to solve our own problems through contact with those desiring to assist us, and through our own experimenting to control diseases and poor growth.

In conclusion, I wish to say, that it is my earnest opinion that no difficulty should be experienced in maintaining turf if good judgment is used and we convince ourselves that plant life, such as grasses, are subject to their environment, that is, they must stay where put and cannot move when conditions for their growth and development are unfavorable. We, as greenkeepers, must study our problems today more than ever and with common sense and sound judgment, provide proper growing conditions in order to fulfill our part in the game.