

# What They Said at Greens' Meet

SPACE limitations prevent publication in full of the many valuable addresses at the 1932 N. A. G. A. convention. In the following digests, practical and concise resumes of each address are presented in convenient and workable form for the greenkeeper and chairman.

Other details of the meet will be found in the news story of the convention which appears in February, 1932, *GOLFDOM*, to which this convention address summary is a supplement.

## Fertilization Pointers

By ROBERT J. HAYES

Greenkeeper, Pelham (N. Y.) Country Club

**I**N THE EAST the problems of many greenkeepers the past year have been most trying. It is my desire to suggest some of the things we may do to help ourselves in these exacting times.

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

In my opinion, many 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. Soils in New York's vicinity are types that need considerable watching and testing to overcome this trouble.

Acid soil not only deprives the turf of its food but retards growth of bacteria necessary to change ammoniates to nitrates so the grass can take it up for blade and 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 advice is to give it attention prior to hot spells of summer.

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.

### Balanced Feeding

The next problem we have is feeding. Excessive food will do more damage than no food at all. Complete balanced foods applied in early spring in combination with compost will amply repay their application 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 after making an application have noted its direct benefits and needs. Nitrogen promotes leaf growth. Phosphorus increases the root system. Potash furnishes the starches and brings the plant to maturity. I believe lime is more important under acid or toxic conditions than the previously mentioned 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.

Grasses are like human beings and have their likes and dislikes as far as plant foods are concerned. Therefore we cannot take too readily 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.

## Greenkeeping Yesterday and Today

By J. O. CAMPBELL

Weathersfield (Conn.) Country Club

**A**S THE MAJOR advance in today's greenkeeping practices, Mr. Campbell named the wise practice of selecting course sites with construction and maintenance costs in view, and of engaging the greenkeeper in time to be on the ground during course construction. He later referred to greenkeeper activity during construction as avoiding poor drainage and improper contouring, which are responsible for many greens troubles.

Because courses are judged by their greens, Campbell placed greens turf choice and condition as prime factors, confusing because of variations in bents. Proper conditioning of bent greens he named as one serious problem of today that did not bother "yesterday's" greenkeeper. He commented:

The greens are either seeded or stolons. The seeded ones are of a mixed bent, usually South German, which produces an excellent turf but does not develop a uniform color as do stolons. Another objection we find to using mixed bent seed is that some is non-creeping and does not form as matted a sod as does true creeping bent. The velvet bent which is included produces a very fine leaf and stem growth but is susceptible to brown-patch and other turf diseases. One of the best-known seeded turfs is Cocos or seaside bent, distinctly a creeping bent which spreads rapidly and makes a very fine turf. Personally, I prefer bent stolons, either Washington or Metropolitan strain. In recent years a larger percentage of the greens in this country have been planted by the vegetative method. This makes a green which is uniform in color, more resistant to brown-patch and has a truer putting surface.

Campbell endorsed mercury compounds as preventives and cures for the fungous diseases with which today's greenkeeping must contend.

With reference to insects and worms he recommended arsenate of lead treatment,

It is my earnest opinion that no difficulty should be experienced in maintaining turf if good judgment is used and we remember that plants 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.

especially advising arsenating greens during construction, and cited confirmation from his own experience.

### Soil Tests as Guide

Concerning developments in fertilizer practice Campbell advised frequent soil testing as today's safeguard. He rated sulphate of ammonia highly as a fertilizer which will hold its present popularity. He stated old methods of compost pile preparation still hold good, and pronounced compost vital in truing greens.

The speaker credited improvements in equipment design with having much to do in raising course maintenance standards and related details of progress in power-operated equipment. Power sprayers and fertilizer distributors he named as correcting the old fault of uneven distribution.

Recognition of the importance of a fixed watering schedule was noted by Campbell who told of his own method of sprinkling mechanically and taking advantage of prevailing winds. He told his hearers:

I do not believe it is economy to use, even in these days, obsolete, worn-out machinery. There are new labor-saving devices being perfected every year. It would pay the clubs to take advantage of this equipment.

As one of today's important greenkeeping duties he named beautification of club grounds and advised earnest study of this subject. Tree preservation he strongly advised.

### Man Is Greatest Difference

The greatest difference in greenkeeping today is in the men. Present-time greenkeeper's responsibilities involve "turf specialist, knowledge of golf architecture and construction, drainage, landscaping, plumbing, carpentry, entomology, electricity, mechanics, botany, accounting and, for good measure, financial advice to the club."

Campbell, a successful practical student