

value as a guide toward plant food deficiencies. Today it is general practice to have a soil analysis at least once a year which will show whether or not there is a deficiency of nitrogen, phosphorous, potash or calcium. It is then a simple matter to determine the proper analysis of fertilizer and amount to use to improve the turf.

The control of weeds in those early days was extremely expensive. The whole force each spring spent two weeks at least digging weeds out of the putting greens. The same procedure in the fall was necessary, digging crabgrass.

Dandelions, plantains and other types of weeds were a detriment to the golfer, in fact, very little golf was played for about three weeks in the spring. The seed-heads made it almost impossible to find a ball. Today weeds are no problem. Weed killers have been developed which kill nearly all existing weeds with one application. Insecticides have been perfected which destroy all forms of insects injurious to turf.

The management of labor and the availability of labor on golf courses has undergone radical changes over the years. We can well remember when it was possible to secure reliable and industrious men, who could be depended on to turn out a day's work intelligently and sincerely.

In those days maintenance methods were of necessity mostly manual, requiring 15 to 20 men to keep an 18 hole course well groomed.

Greens and tees were generally mown by hand which was one of the reasons why it was necessary to have such a large force.

Trap maintenance was the most expensive item. Two thirds of the labor budget was spent on traps. With the advent of power mowing equipment and its adaption to modern maintenance methods, the number of men necessary to keep a course properly groomed today has dropped to roughly 12 men.

The superintendent is primarily responsible for the fine condition of our golf courses. He is alert and takes advantage of new methods and equipment and keeps the budget within bounds because increased labor costs, increased equipment and supplies cost, and maintenance budgets have doubled in 25 years.

The golf courses of today certainly reflect what education and modern maintenance methods have accomplished toward near perfection of playing conditions. This perfection has been partly responsible for par-breaking golf. The roughs on golf courses today are little if any hazard to the golfer because of the demand for short cut rough.

Fairway sprinkling systems are being used extensively by private clubs and are

a contributing factor in the development of the fine turf on fairways. The liberal use of water has in many cases developed bent grasses which necessitate close cutting and which on some courses has practically eliminated bluegrass as a fairway turf, as it will not survive long when cut under one inch. The result is re-seeding fairways with bent grasses.

Supts.' Standing Improved

The superintendent has improved his professional standing because of his intense interest in research and its application, reflecting in the improved condition of golf courses. Club officials and players alike have recognized their splendid efforts by increased remuneration and in most cases paying their expenses to turf conferences and field days, because of the benefits to clubs through their superintendents attending such meetings.

If each club would send its superintendent to these meetings, expenses paid, it would be repaid many times.

If club officials could be induced to attend monthly meetings of the superintendents, they would then have a better understanding of what their superintendents' problems are and I feel sure they would be more cooperative.

There is much yet to be done in the development of fine turf through research and its intelligent application.

It has been my contention and belief for many years that if the future superintendent will be able to pursue his education in a university or college, including in his curriculum "Agrostology", the growing of fine turf, he will be qualified to fill a position as superintendent after combining his classroom, laboratory and test plot work with experience in actual golf course work.

Florida-Georgia Turf Men Organize

The Florida-Georgia Turf Assn., designed to foster better turf conditions in the North Florida-South Georgia area, was organized recently at a meeting at Timuquana CC, Jacksonville, Fla.

Attending the inaugural session were superintendents of golf courses within a radius of more than 100 miles of Jacksonville, as well as turf management personnel from surrounding U.S. Navy installations. Norman Johnson, course supt., at San Jose CC, South Jacksonville, was elected temporary president. L. N. (Buddy) Clark, supt., at the Ponte Vedra (Fla.) Club, was named temporary secretary.

Host at the meeting was Pat Deavy, superintendent of greens at Timuquana.

The new organization plans to invite

all persons in the area who are interested in better turf conditions to join the association. This includes representatives of cemeteries, parks, landscape gardeners and home owners.

It is expected that at its next session, at which Johnson will play host, the association will name a permanent slate of officers, and authorize a program committee to plan a year-round series of events in the turf-improvement field.

Progress in Maintenance Has Influenced Course Design

By CHESTER MENDENHALL

Supt., Mission Hills CC, Kansas City, Mo.

When we read in GOLFDOM that October 1951 marks the completion of 25 years of its publication, we look back and think of the advance in the field of turf during this period.

One of the first things that comes to my mind is some of the equipment, either horse-drawn or by an old iron wheel tractor. The fairway units were only enlarged lawn mowers. The greens mowers were pushed by hand and the old barrel cart was used for applying wet chemicals to the greens. At that time help was plentiful and most courses were operated with a large crew of men doing all the trimming with hand mowers and scythes.

Today the high cost of labor necessitates the use of fast moving power equipment which reduces the man power needed and at the same time gives the golfer a better playing condition.

Large power equipment has had its effect on course design. The old high steep faced bunkers have given away to the more gentle slopes that can be easily cut with power equipment. The size and number of sand traps have been reduced and a number of sand traps along the sides of fairways have been converted into grassy hollows. On other courses trees have been planted through the roughs creating a permanent hazard for the golfer who strays from the fairway.

There has been a rapid advancement in new chemicals for the control of turf diseases, insects and weeds.

Twenty-five years ago bichloride of mercury and calomel were the stand-bys for disease control. This required very careful handling or the effects of the control might be worse than the disease. Today's chemicals can be applied with very little danger of injury to the person

applying them or to the turf. The same applies to insect and weed controls. Not until rather recently have we heard of chlordane or D.D.T. for insect control, or of the herbicides that are playing such an important part in weed control.

There has been a big change in turf maintenance education. Twenty-five years ago turf research work was being carried on by the USGA Green Section and a very few colleges. Today turf research work is being carried on at some college in most every district in the United States. This work is correlated through the Green Section and the results of the work are being brought to the golf clubs and the golf course superintendents by a number of bulletins and periodicals. The oldest strong influence in this respect is GOLFDOM. I wish to express my thanks to Herb and Joe Graffis for the part they have played during these 25 years in the advance of golf and its business with GOLFDOM.

Pride in Fine Courses A Spur to Supts.' Progress

By CLARENCE W. STROUSE



"Chet"



C. W. Strouse

My introduction into the golf business was in 1913, as one of the grounds crew. After two years I became superintendent.

During the years following World War I, I saw many changes in golf course maintenance, such as going from horse-drawn equipment to motorized, from plain grass greens to bent and from cow-pasture fairways to a more modern turf.

In the early 20's the greenkeepers began to gain recognition as professional men and by 1925 the National Greenkeepers Association of America was founded.

Golf course maintenance from this point on became a more serious business. The development of beautiful creeping bent greens closely clipped and methods of watering fairways were two of the earlier details of progress.

To help the man who wanted to further his knowledge of care and betterment of golf courses the book on "Turf for Golf Courses" by Piper and Oakley was published. The USGA Green section began experimental projects all over the country, agricultural colleges began short course work. The organizing of district turf associations in connection with the national association brought the men close together so they could exchange viewpoints, Bulletins issued monthly by the