Mr. Feser, one of the leaders in Minnesota and national superintendents' organizations and educational work, has not only been responsible for the maintenance of Woodhull, one of the best conditioned private courses for more than 30 years, but has maintained and operated a fee course of his own. He is regarded by his colleagues as one of the top practical men in course maintenance. — Editor.

speeded up the average "know-how" of course maintenance.

It is only fair, I think, to express an opinion on what might well be the greatest lack of progress. That is the attitude of average club officials on the value of a capable superintendent. Turf men have failed, I think, in this very important matter. There is little in the way of paycheck prospects to induce young men to train for superintending the maintenance of country clubs, and we have done little to educate officials along this line. As a result we have few young men in the business today, and the golf clubs are bound to suffer a lack of capable superintendents in the next 25 years.

I think that of the thousands of ideas to which I have been exposed because of my fortunate contact with other turf men, the one which has meant the most to me was suggested by Dr. Stakeman of the University of Minnesota Farm School many years ago. In the early '20s I was convinced that if one good variety of bent could be established on all of my greens, the problem of maintenance would be simplified to a routine procedure and my club would enjoy uniform putting surfaces of every green.

Dr. Stakeman pointed out the weakness of this reasoning by drawing a comparison with the experience of wheat growers and their constant battle against diseases affecting wheat. He explained why no variety of wheat remains immune to rust and other diseases, and why it was necessary to breed and test new varieties in the never-ending battle.

It occurred to me that what was true of wheat could be true of bent. I discarded by "single bent" theory and substituted a type for a variety. Since that time many of the old "varieties" have gone bad, but thanks to a constant effort to keep many varieties of similar type on my greens, the average putting surface on all of my greens has been much better than would have been possible had I held to my original opinion.

Quick Use of Research Has Speeded Supt's. Progress

By JOHN McGREGOR

Joe and Herb Graffis saw the necessity for a national golf magazine, which would cover all phases of golf club activities, twenty-five years ago.

After much hard work with Herb as editor, collecting material which would be of interest to all executives in the business of golf, and Joe as publisher and advertising manager, securing advertisements to help defray the expense of printing and distributing the magazine, the net result was GOLFDOM, a paper which is eagerly looked for and read by the heads of each department. It has truly fulfilled the dreams and expectations of Herb and Joe. Congratulations!

There have been so many contributing factors in golf course maintenance during the past 25 years that it is difficult to catalog them.

Turf research has contributed much toward the development of fine turf. 25 years ago the Green Section of the USGA contributed nearly all of the research work done. Today many colleges and universities are taking an active part in turf problems, maintaining turf plots and endeavoring to solve the many problems with which the grower of fine turf is confronted.

It is only fair to state their efforts have proved to be of the utmost value. Golf has been benefitted beyond estimate by their continual search for and development of grasses most suitable for putting greens, fairways, tees and rough in the various areas of the U.S. and Canada.

Supt. Hungry for Facts.

The course superintendent is very much aware of the value of research and is hungry for any information that will aid him in providing better playing conditions for those who love golf. Every field day at the experiment stations, wherever they may be held, you will find in ever increasing numbers the practical men who have to produce the finished product. These men are serious students of the profession, and readily absorb the information available and put it to mighty good use.

Conrtol of fungus diseases has developed through the years to the point where "dollar spot" and other fungus diseases are no problem. Intelligent application of the information at hand is without doubt the answer.

Years ago fertilization of fine turf was not given serious thought. We used to apply bone meal, sheep manure or any material which would improve the color of the grass. Soil analysis had not developed to a point where it was of any 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 sec.treas.

Host at the meeting was Pat Deavy, superintendent of greens at Timuquana. The new organization plans to invite