Every year more greenkeepers are attending the short courses offered by the various colleges and universities to the greenkeepers. There are about ten colleges who now offer these courses and they are drawing larger classes every year.

Pennsylvania State College had a conference the latter part of February and had an attendance of eighty greenkeepers. About twenty attended the four weeks' course.

The wise greenkeeper will take in all the courses he can and improve his knowledge along scientific lines. If he can talk theory and put it into practical use he will be in big demand. All the schools who offer the short courses have an experimental station combined to the college and they work out problems which would be too difficult for the average greenkeeper.

The club managers, professionals and greenkeepers met in Pittsburgh and discussed ways and means whereby a closer harmony could be worked up between the three organizations. The general opinion of all represented seemed to be, "Three departments on every golf course, and complete cooperation between the three departments."

We are all serving the same cause whether you be manager, pro or greenkeeper; that is, your membership. Complete cooperation between the three will result in better positions and better service.

Don't forget your dues are due. Send them to 1101 Farmers Bank Building, Pittsburgh, Pa.

Have you given the Death Benefit Fund any thought? A card to the secretary will bring complete information. Join it now and help out a brother greenkeeper's family in case of death.

There are prospective members for the association in your district. Get after them and sign them up. They will be glad they have joined after they are in.

Get the rollers and fertilizer distributor out and oil them up. It won't be long until we will be using them.

The report is out that the Fescue seed will be of low germination this year. Be careful where you buy it and insist on a true analysis. If you have any doubts about it, have it analyzed by some competent expert.

Boost the association and get a member.

Mid-West Notes

By A. L. BRANDON, Secretary

The March meeting will be held on Wednesday the 25th, at the Great Northern Hotel, Chicago. This will be the final indoor meet of the season. The first outdoor meet will be held April 27. The course has not yet been chosen. If you have any courses that you would like to visit during the course of these summer meets, speak up! now! so we may arrange our meetings at courses which pleases our membership the most.

The speaker for the March meeting will be Dr. Raleigh. You will find him very interesting and most competent. The president Mr. Bezek appointed the following committees:


Membership: John MacGregor, Chairman; C. A. Tregillus, R. N. Johnson.

Tournament: Alfred Buller, Chairman; Stanley Arendt, J. T. Langell.

Speaker and Entertainment: A. L. Brandon, Chairman; R. N. Johnson, M. L. Bezek.

Midwest meetings for the recent two years have been open only to members and guests—beginning with the first outdoor meeting in the latter part of April—the outdoor meetings will be open to any one interested directly or indirectly in golf maintenance.
Amherst's Fifth Annual Show

By LLEWELLYN L. DERBY

Massachusetts Agricultural College’s fifth annual exhibition and conference on golf course maintenance was held in Stockbridge Hall on Friday, Saturday and Sunday, March 13, 14 and 15. It was arranged by members of the ten weeks’ winter school for greenkeepers and proved to be another interesting and instructive affair.

It would seem that eventually these professional greenkeepers and golf course managers who came to spend the winter here in the Connecticut Valley and study their problems with Professor Lawrence S. Dickinson and his splendid corps of assistants from the State college faculty, would have to repeat some of the features presented at earlier exhibitions, but judging from their latest effort, it does not work out that way. Perhaps it is this New England atmosphere that inspires originality.

The speaking program was certainly the best yet presented. Opening Friday evening with a talk on “Materials Used in the Construction of Mowers” by a leading commercial authority and continuing with an illustrated lecture by Professor Frank A. Waugh of M. A. C.
on "The Appreciation of Landscape in Golf Courses" there was ample opportunity to listen in and derive much good before the closing talk by Professor Dickinson Saturday afternoon on "Some Interesting Facts on Golf Course Mowers."

Saturday morning from eleven to twelve o’clock three round table discussions were in progress simultaneously with the following subjects under fire: "Soils and Fertilizers" with Prof. M. H. Cubbon of the college agronomy department as leader; "Golf Course Drainage" led by Prof. M. J. Markuson of the college engineering department; "Water Systems" led by Prof. C. I. Gunness also of the engineering department.

Saturday afternoon there were two interesting speakers that drew perhaps the largest gathering during the conference, Francis Ouimet of the Woodland Golf Club at Auburndale, Mass., and Talbot C. Chase of Boston, president of the Massachusetts Golf Association. In a very interesting manner Mr. Chase told "How the Massachusetts Golf Association Can Help the Greenkeepers."

"Mr. Quimet, winner of the American open championship in 1913 when only 20 years of age, was well qualified to speak on "The Value of a Greenkeeper from the Low Handicapped Golfer’s Point of View."

H. B. Sprague, agronomist from the New Jersey Agricultural Experiment Station was the speaker Saturday evening on the topic "Some Water Relations of Turf Plants." The question box, ever popular feature, followed.

Sunday morning there was a visit to the experiment golf plots of the college. In the afternoon, after Professor Dickinson’s talk, there were motion pictures and a question box and another worthwhile get-together was over.

It is rather of interest to reminisce on this greenkeepers’ school here at Amherst. When it was started five years ago it was the first of its kind in the country. Its value soon came to be recognized and it has become so popular that it is now necessary to limit enrollment each year. Connecticut, Illinois, New York, Minnesota, and Iowa in addition to Massachusetts had representatives at this winter’s school.

In addition to members of the college faculty Professor Dickinson has been assisted in the school by Carl Treat of Auburndale, manager of Mr. Ouimet’s home course, Woodland; James McCormack of Stoneham, superintendent of the Unicorn Country Club; and Marston Burnett of the Albemarle Golf Club.
Sand Greens in Oklahoma

By DON SPARKS, Greenkeeper
Chickasha Country Club, Chickasha, Oklahoma

Sand greens have made a rapid growth here within the past two years and I have done a great deal of work constructing them during the last ten years. It was at the Chickasha Country Club that I constructed my first sand greens, this being the oldest course in the county. They are still using sand greens.

Two years ago I designed and constructed a nine-hole sand green course one mile west of Chickasha, on the Hill estate which is now being converted into an eighteen-hole grass green municipal course, known as the Hill Golf Course.

Last April I began constructing a nine-hole sand green course five miles southeast of Chickasha. This course, just off the highway is known as the Meadowlake Golf Course and is noted for its wonderful hazards, both natural and artificial. Better golfers appreciate playing on it that they might show their skill with their different clubs.

I also constructed sand greens for three miniature courses last summer. A nine-hole course is now being constructed near the Oklahoma College for Women. It is being built especially for the O. C. W. girls. These four golf courses have been equipped with my sand green golf cups and steel flagstaffs which have proven very satisfactory.

I notice that a number of the miniature courses are not using regulation cups. I would suggest that any greenkeeper who recommends or constructs practice courses of any kind insist on regulation cups being used. Of course, some of the Tom Thumb greens are so small that when a regulation cup is placed in them there is no putt left.

In the December issue of the National Greenkeeper I became very interested in Mr. Henderson's story and suggestions dealing with practice golf courses. I had already planned to make a driving course and was wondering how I might arrange...
some other practice shots in connection with it but since I read Mr. Henderson's suggestions on the pitch and putt course I decided just to reverse the situation and build the driving course in connection with it. I believe most every club or club member would appreciate having a practice course of this kind. As a rule, practicing on the golf course is not satisfactory, especially when match plays are being played.

I should be glad to furnish free to any member of the N. A. G. A. any information concerning the construction and maintenance of sand greens.

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**NO. 2 GREEN—299 YARDS—4 PAR.**

This sand green is on a knoll and affords a chance for a possible three in that the ball can be pitched right to the pin the second shot with the hope of having it stick. A trap has been placed to the right and back to catch the long shot.

This is a typical sand green surrounded with a good Bermuda turf and equipped with a sand green cup and a keen steel flagstaff, which allows the player to hole out from off the green with less danger of striking the flagstaff. I am standing back of green to show elevation.
Ask a group of Green committee chairman or greenkeepers what two factors exert the most influence on the costs and results of turf maintenance, and the answers will be soils, terrain, amount of traffic, construction methods, type of equipment, drainage and other similar factors.

Neither the Green chairman nor greenkeeper will say "my greenkeeper and myself" or "my chairman and myself." Possibly it is modesty or an inferiority complex that prevents any such expression of self-importance. Then, too, there is the chance that uncertainty on their part keeps them constantly looking for an opportunity to place elsewhere the blame for failure. Whatever they think, they are the two factors that have the greatest influence on the costs and results of golf course maintenance.

These men, because of their positions, can use or abuse scientific principles; they can work with nature or against nature; in fact they can control all factors except sunshine, rainfall, darkness, light, heat and cold. By their judgment they can improve or lessen the playing standard of the course. Furthermore, they are important factors because they are human beings, and as such, are subject to human emotions.

The Green chairman thinks he is "boss" because his position ranks the greenkeeper. The greenkeeper often thinks he is "boss" because he has been on the course many years or has "a lot of practical experience." Both are sincere in their beliefs and desire to work for the best interests of the club but each feels that the other is somewhat a hindrance that is too valuable to lose, yet very annoying. The above irritation exists in varying degrees of intensity at too great a number of golf clubs, and is probably due to the failure of the Green chairman and greenkeepers to fully appreciate and evaluate each other.

The greenkeepers should realize that chairmen are usually either active or retired successful business or professional men. The fact that they are successful indicates that they have the ability in their chosen fields of endeavor to organize, to direct, and to diagnose trouble. Also to cut cost of production if they are business men. These chairmen, with the exception of doctors and lawyers (they are excellent chairmen) are in the habit of working with and producing inanimate objects, and they fail to appreciate the significance of life in turf.

If a piece of machinery is broken or becomes badly worn in a factory, or merchandise is injured in a store, the chairman in his business, replaces at once or repairs the piece of machinery or damaged goods. Many chairmen have so thoroughly acquired this quick repair habit, that they do not understand why turf, which has life, cannot be made new immediately; they then become impatient. Thus the chairman's failure to fully appreciate the full significance of golf turf management affects the costs and results.

Greenkeeper has his problems

Greenkeepers should realize that with some chairmen the golf course is a toy, and they play with it in a boyish way. If so, the boy should be considered as such, and be guided by the greenkeeper, for the greenkeeper's wages are set by the turf and not
the toy he produces. Playing with a golf course has a much greater effect upon the costs and results than playing on it.

Chairmen take pride in the detailed knowledge they have of their business and value such knowledge in others. They also practice the use of experts and trained men in their business, even going outside their staff for professional advice. Yet we find chairmen giving detailed orders to a greenkeeper, and not having detailed knowledge of turf maintenance. Such a condition greatly affects the costs and results of golf turf maintenance. The executive ability of the chairman is invaluable to the greenkeeper and to the club. To the greenkeeper it acts as a stabilizer during periods of over-enthusiasm.

Chairmen of the Green must realize that the business of golf turf management has now become a profession. When golf first started in this country greenkeepers were laborers. As the game has progressed the greenkeepers passed from laborers to skilled laborers, then to craftsmen and now have become professional.

Better Greens at Half the Cost

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If your course is not among the many already using Turf Builder, we shall send without charge a 50-pound bag to any greens chairman or greenkeeper writing on club stationery. It is enough for an area of 5000 square feet.
GREENKEEPING IS NOW A PROFESSION

Greenkeepers are proving their right to a professional standing by their sectional monthly meetings for professional improvement. These meetings cover the entire United States and a considerable portion of Canada. The National Association of Greenkeepers of America with its annual convention for professional improvement is further evidence for professional recognition. The New England Greenkeepers' Association has donated a sum of money to the Massachusetts State Experiment Station to be used for research in turf culture.

Greenkeepers are also making themselves professional by attending schools for greenkeepers and purchasing books on subjects pertaining to turf culture. Such actions are bound to have an effect upon the results and costs of turf maintenance. To hold their claim for a professional rating the greenkeepers must be professional in their actions, dress and conversation.

Many greenkeepers have an inherited inferiority complex, which in the past has been very expensive to themselves and for the clubs. This is less noticeable than it was five years ago but it still is a condition which greatly affects the costs and results. Because of this complex the chairmen have naturally felt that the greenkeeper was far away from a professional standard, and considered him as he acted, as a servant.

This inferiority complex has caused the greenkeepers to be narrow in their views, undertrained in their cultural treatment of the turf, subjective to outside influences and to feel constantly on the defensive; or it has made them the exact opposite. Either condition affects the costs and results.

Chairmen and greenkeepers frequently have not had the opportunity to obtain a background that can enable them to understand or interpret scientific facts and research; or if they do understand the principle, cannot apply it to their particular problem. Lack of understanding is frequently the cause of ridiculing sound cultural principles. Certainly this condition affects the costs and results of golf turf maintenance.

MUST PAY ATTENTION TO DETAILS

The 1931 Green chairman should exercise his executive ability to its fullest extent, and at the same time remember that a good executive does not spend his time on details. The 1931 greenkeeper must pay attention to details, interpret and apply
scientific information, for 1931 is going to be a year in which the knowledge of the basic principles of turf culture will be of high value.

The Green chairman and greenkeeper must both understand and appreciate the ability and weaknesses of each other, and be tolerant. Where one is better suited for leadership, he should lead, but he should give way to the other when the proper occasion arises. The chairman may be the better leader through the mazes of club officialdom and club policies, but not over the green path from tee to green.

Next Month—Similarity between golf course maintenance and factory operation.

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**Canadian News**

By J. H. EVANS, Golf Editor, Toronto Globe

Golf history insofar as the Dominion is concerned was written recently when Secretary B. L. Anderson, of the Royal Canadian Golf Association, appeared before the Ontario Greenkeepers' Association at a luncheon in Toronto, to secure the assent of the organized greenkeepers to the golf association's plan through which it will carry on demonstrations in the culture of grass, the maintenance of equipment and other work in Winnipeg, Toronto and Montreal this year.

However, before Mr. Anderson secured the assent of the Ontario greenkeepers to the golf association's scheme, President W. J. Sansom let it be known that the organized greenkeepers were engaged in the study of problems twelve months in the year and that any proposal which precluded the greenkeeper from expressing an opinion would fall short of its purpose.

* * *

"No doubt, the green section of the Royal Canadian Golf Association will accomplish a good deal," said Mr. Sansom. "At the same time, the greenkeeper feels that a green section composed of chairmen of Green committees alone will not achieve its purpose. It is obvious, it is right and it is natural that greenkeepers who are called on to maintain courses to a high standard are capable of carrying on the work proposed if properly organized.

"In no sense can we be classified as a labor organization. Greenkeeping at present is something more than manual labor," he continued. "We have the publication of our monthly magazine entirely devoted to the interests of the greenkeeper and golf course maintenance. Practical experiences are set down through articles contributed from course superintendents working under the greatest possible variety of conditions."
Make a light top dressing NOW with "Windrift"
Hardwood Humus Material

Absorbs heat for early spring growth.
Brings turf much earlier.
Creates an accurate putting surface.
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An improved model Ohio Greens Cultivator loaned with each car shipment.

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While Mr. Anderson listened attentively, Mr. Sansom sketched the development of the Ontario Greenkeepers' Association and told of the work which the National Greenkeepers' Association of the United States was accomplishing. Mr. Sansom referred to President John Morley in glowing terms and pointed out that clubs of the United States on many occasions had sought his advice.

The proposal of the Royal Canadian Golf Association, while it accords no written recognition to the organized greenkeeper, depends on him if it will be a success. The proposal contemplates the establishment of plots for demonstration, not experiment, and the results of these experiments will be distributed four times a year in the form of bulletins to be approved of by committees in Winnipeg, Toronto and Montreal.

These committees are composed of laymen who must depend on course superintendents and the better posted greenkeepers for opinion and judgment. As a consequence, the green section enterprise of the Royal Canadian Golf Association, is depended on the greenkeeper, and is in all likelihood the reason why it was submitted to the Ontario Greenkeepers' Association for its study.

The arrangement which the Royal Canadian Golf Association has reached with the Federal Government is that the government will create plots in the three cities on the distinct understanding that experimental work will be carried on only by government stations and farms. The plots are for the purpose of carrying on demonstrations of government experiments which have for instance reduced 52 varieties of bent grass for use on golf courses to four types.

The Federal Government has guaranteed seed, stolons, fertilizer and other material required for the plots, and insists on providing the detailed specifications as to their use. The plots are to contain practice fields so that work can be carried on under real playing conditions.

Four times a year, the three committees are to pass on to the government the results of their observations. For instance the committee in Ontario is composed of Dr. A. B. James, Gordon Cassels, Horace Grout and Frank Hay. The committee is composed of a medical doctor, a lawyer, a railway superintendent and a business man. The Montreal committee is made up of H. M. Maxon, George H. Forester and James Buchanan. C. W. Jackson is chairman of the Winnipeg committee.

It is probably a safe observation to make that the members of the three committees will consult their greenkeepers throughout the season before passing judgment on the results of demonstrations, the responsibility for which must be accepted by officials of the Federal Government.

An illustration of the problems which will confront the committees is to be had in the dispute between an official of the Quebec Golf Association and Stanley Thompson, who is favored by the Royal Canadian Golf Association with the reputation of being Canada's best authority on golf courses and their maintenance. The official of the Quebec Association was formerly employed by a seed firm. His claim is that only seeded greens, of other than bent, are lasting and successful, and also that bent greens are entirely unsatisfactory.

The Ontario section of the R. C. G. A. relying on experience and the advice of Mr. Thompson is strongly in favor of bent grasses. It also relies on experiments carried out by the United States government. Mr. Thompson's opinion is that bent stands the winter, matures early and lasts longer, although he is willing to admit that the green of another type may have some advantages over the bent green for a brief period during the summer.

Both Mr. Sansom and Mr. Anderson agree that the Royal Canadian Golf Association must not duplicate work being done by the Federal Government, from which they are receiving assistance, and must proceed slowly to avoid the necessity of developing a new policy.

The luncheon at which the Royal Canadian Golf Association's plan was presented to the Ontario greenkeepers was attended by Major Black, Canadian Industries, Ltd.; Professor Tomlinson, Guelph Agricultural College; Secretaries J. Cameron, E. C. Bowyer, A. Tulloch, J. Perkins and T. Perkins, from local golf clubs and all greenkeepers. President Collyer, of the Royal Canadian Golf association, was unable to attend the luncheon.