Minnesota Gossip

By H. E. STODOLA, Secretary



H. E. STODOLA

HE September meeting was held at the Keller and Hillcrest courses. There were sixteen members present. Keller has eighteen greens of Seaside bent, one practice green and a large nursery of the same. It was all planted by seed. It does not form a mat and grows fairly upright. However, those clubs that have greens with a mat have this advantage. The pitch shots and even long irons and spoon shots light on the green and imbed themselves in the mat before they roll. The mat shows up their ball and also protects the green. Where there is no mat the ball goes through the grass and brings up dirt.

Therefore, there is an advantage in a mat that Seaside does not have.

KELLER KEEPS GREENS ON DRY SIDE

AT KELLER we have to keep our greens on the dry side, otherwise they would be punctured full of holes. Some of our members play at the University course which has stolon greens and then come back and complain that ours do not stick as well.

They say, "Why can't you develop the mat that other courses have." They do not realize that this mat is a breeding ground for disease. They do not realize that this mat needs continual raking and a matted green does not give the truest putting surface.

We like this about Seaside. A real Seaside green is beautiful. We know that because we have several. The color is a light apple green and stands out from bluegrass approaches and fairways. The grass when fed and watered properly remains fine-textured and upright. It can stand brown patch and snow mold quite well.

The results with Seaside at Keller are encouraging and with proper care and more experience they will have all fine greens there. The U. S. G. A. plots for this section are located at Keller and are well patronized by the public.

MAKING COMPOST AT KELLER

THE compost making at this course is business-like. A hammer mill crushes the peat, compost and sand, and blows it into bins, two for (compost) peat, one for compost and one for sand. Each bin has a hopper. Below these four hoppers runs a track. On this track is a small



car that has a scale on it. It takes a certain weight of peat, compost and sand and stops before a large concrete mixer. There is a certain amount of arsenate, Calo-Clor and fertilizer added and then all is dumped into the concrete mixer. From here an elevator carries the mixture to two bins. These bins have shoots on the outside, alongside of which a truck can run and be loaded up.

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After looking this plant over the greenkeepers left for Hillcrest club, where Stan Graves is the greenkeeper. Stan runs this course with five men and himself. He has fifteen bent greens that are fine greens, healthy, heavy growth and upright. Each year he improves one or two holes and now is in a process of moving a green. He is adding trees and shrubbery each year.

Hillcrest will some day have a fairway watering system and then will be the equal of any course in the Northwest. Stan cuts his greens with a power mower and they surely look good. Hillcrest owes much to Stan Graves, who is bringing the course to the front more and more each year.

The next meeting of the Minnesota Association will be at Midland Hills and the University course, the second Monday in October at 2:00 o'clock.

Indiana Speeds Along

By CHESTER COVAL, Secretary

HE regular monthly outdoor meeting of the Indiana Greenkeepers' Association was held with Mr. Jerry Helvie, LaFontain Country Club, Huntington, Indiana, with the largest attendance of the season.

Following a round of golf and an inspection tour of the greens a delicious luncheon was served with a "Roosevelt Tonic."

The business meeting was called to order by Mr. Carl Coy, vice president, and many interesting topics were discussed, one of which was "the organizing of the District Association."

Indiana speeds along with seven new members which were initiated into the Association at this meeting. We sincerely hope every meeting will be as successful as this August meeting.



How We Overcame

Colonel Morley Asks the Members of the Nat Statement of Conditions.

Colonel Morley Asks About Depression

September 7, 1932.

To the Officers and Members of the National Association of Greenkeepers of America,

Greetings:

Dear Sir and Brother:

We have now arrived at the time of year when we can pause and do a little thinking and realize that the season just passing was one of entertainment and pleasure to some, but a year of hope deferred to others.

Never in the history of greenkeeping have greenkeepers been forced to the acid test as they have for the season of 1932. Most of us have been compelled by necessity to trim expenses to the bone, both as to labor as well as materials. We are very anxious to learn what effect it has produced on the general condition of the golf courses throughout the country along the present economical lines, and especially if these conditions must prevail during the season of 1933.

Won't you please take a little time and send, in your own way, to our official organ, the NATIONAL GREEN-KEEPER, Caxton Bldg., Cleveland, Ohio, a brief outline on "How You Overcame the Depression of 1932." Do this now so it may appear in the next issue, which goes to press September 15.

Don't throw this request into the waste basket. Write and mail your experiences at your earliest convenience.

I personally know our members will be as glad to read what your experiences have been as you will be to know the experiences of others.

Trusting that you will comply with my request and with best wishes, I remain,

Cordially yours,

JOHN MORLEY,

President.

P. S. Now is the time to commence to lay your plans for our 1933 Convention and Golf Show at Chicago. We are going to open the World's Fair, and we want the support of all members to make it another grand success.

—I. M.

Depression Played Havoc

By JOHN MACGREGOR, Greenkeeper Chicago Golf Club, Wheaton, Illinois

THE depression certainly played havoc with maintenance budgets during 1932. The loss of members has made it difficult for many clubs to operate at all. According to the best information, every club is working under a reduced budget, some drastic, others slightly reduced.

There is no question a b o u t the hardships worked on many greenkeepers; on the other hand it has been the means



JOHN MacGREGOR One of the outstanding greenkeepers of the United States

of the greenkeeper finding himself. It has made him a better executive, he has had to reorganize his system of maintenance and he is today a more capable man than he was a year ago.

In most cases the golf course is in just as good condition now as it was previous to the depression. This shows that the greenkeeper can be a good business man when put to the test. Now that he has shown what he can do under adverse conditions he will be expected to continue the methods with which he has been so successful.

Citing my own experience I will say that old man depression is grovelling in the dust. To accomplish this partly I changed our system of fairway watering. We had previously used the Boston Park sprinkler as our means of distribution. This sprinkler did excellent work but it was slow. We required three of them and our hose was 2-inch. You can easily understand how slow and laborious the task of irrigation was. It required six men to operate this system, that is, three men worked twelve hours,

the Depression of 1932

ional Association of Greenkeepers of America for a Frank his is No Time to Conceal the Facts

from six p. m. to six a. m. and three men worked from six a. m. to six p. m. All that could be accomplished with this force was one fairway every nine hours and seven days to complete the circuit of the course.

The cost for labor was thirty-five dollars per day, which meant for the season an expenditure of between two thousand and three thousand dollars. Quite a large item on the maintenance budget. The power bill too was high—running around nine hundred dollars.

In studying means of reducing expense I felt that quite a saving could be accomplished if the system of distribution was changed. I then estimated the cost of changing over, which was submitted to the Board of Directors for their approval and acceptance. Their answer was positive.

I then purchased the necessary equipment which consisted of two thousand feet of one-inch hose, fifteen rotary sprinklers, each capable of distributing twenty gallons of water per minute, eighty-four hydrant reducers from two to one inch, the total cost being a little over seven hundred dollars. The cost of this change has already been saved in labor.

Two men operate this system, as against six in previous years. The sprinkling is done only at night, the course is watered twice a week as against once previously. Less water is used than the old system and naturally the power bill will be reduced in proportion.

It was necessary with the old system to saturate the turf to enable it to hold moisture for one week. This was too much water—more than the grass could use. With the new system less water is applied and the turf is watered twice a week resulting in a more healthy turf, also a more healthy budget. No interference with play during the day which in itself is worth the change.

A ten per cent reduction in wages also helped in the reduction of expenditure. I know we will have effected a substantial reduction in maintenance at the end of our fiscal year. The condition of the course was not sacrificed by the saving.

I hope others have been successful in their efforts.

Anderson Keeps Within Budget

By JOHN ANDERSON, Greenkeeper Crestmont Golf Club, West Orange, N. J.



JOHN ANDERSON Who knows conditions in New Jersey

Most golf clubs in the United States, as well as those abroad, have felt this depression, especially as applied to the maintenance of the course. As regards the restaurant, generally members pay for what they get at the time—or at least monthly, but the maintenance of the course is acquired from dues, green fees, etc.

This season, owing to resignation of members and reduction of green fees the Finance Commit-

tees have had a tough job to apportion the available funds so that the course could be kept as near as possible in the condition it has been heretofore.

Here at Crestmont our budget was cut some \$9,000 and so it has been my job to give the members, as nearly as possible, the golfing conditions they had in previous years for \$9,000 less than formerly.

How did we do it? Well, starting in March, we decided just how much we could afford for labor and cut our force accordingly from 12 to 9 men and from \$5.00 per day to \$4.00, which is now the maximum for this class of labor in our state. Then

the balance for material and supplies was carefully apportioned so that the greatest good might be had for the greatest number so to speak.

Fortunately in the past we had a liberal budget and our greens, fairways and tees were in A-1 condition. It was decided we could not afford to neglect the greens so that meant that fairways, tees, rough, etc., could not have the attention formerly given. Of course construction and improvements were out of the question. Our seed bill was cut 75%. The fertilizer 50% and as it turned out to be an exceptionally dry summer the rough did not want much trimming.

But while the drought gave us a break in mowing, there was extra watering to be done and our members gave us to understand that no sprinklers could be on the greens during play, which I am convinced is as it should be both for the players and the greens, but that meant watering had to be done

either evenings or early mornings and at extra labor cost. We decided to water the greens in the evening between 6:00 and 10:00 p. m. and the tees and approaches in the early morning.

No overtime rate was paid for watering, only extra hours. The result on August 31—we are still well within our budget with a fairly liberal amount to give some fairways a fall topdressing and seeding to remedy the condition brought about by the prolonged drought.

But, alas, the treasury is depleted and until it is replenished somewhat, this will have to wait, but just how long can it afford to wait? Certainly not another year, and if not taken care of by next spring the playing condition of the course will not be so good, and we will be liable to lose members, and certainly some income from green fees. What will be more serious, still a much larger amount will have to be spent to put it in the same A-1 condition.

Moore Says South Is Smiling

By HUGH C. MOORE, Greenkeeper Radium Springs, Albany, Georgia



HUGH C. MOORE

Your letter of September 7th received and I will do my best to answer your questions.

The past summer with the Southern greenkeepers has been a very good season, owing to the fact that we have had plenty of rain. As for mainten ance, the Southern courses have suffered, I believe, more than the

majority, as they have lost many members, which means the loss of money.

My course in the past year has not been up to standard, as the traps have been neglected; the fairways have suffered somewhat, more or less for fertilizing; the rough was left to grow much longer and the tees were not cut as often.

We decided to save on these areas as we believed they could be neglected better than any other part of the golf course. The greens have been kept up to standard, for that is one part of the course I do not neglect. We have also saved on watering.

We have been very much pleased in regards to the very few complaints which the members have made. I believe that the majority of them realize the struggle which the greenkeepers have had to go through and also conditions of the past two or three years.

I am also pleased to say that conditions are much brighter throughout the Southern states and there seems to be more play at the present time and the people as a whole are smiling more.

Mohawk Uses Only Experienced Men

By JAS. K. THOMSON, Pro-Greenkeeper Mohawk Golf Club, Schenectady, N. Y.

Y ours of the 7th at hand with reference to golf course upkeep during this year of low appropriations.

Last year I felt we were in for a bad 1932 year and made sure I had all my machinery in first-class condition at the end of 1931. I also had extra compost piles. I insisted my fairways and greens needed a light fall fertilizing in spite of the fact they had been fertilized in the spring. This gave me a real fine start this spring when our appropriation was cut \$5,000.

Of course, I feel clubs must spend a certain amount of money on their courses if they want them kept in first-class condition, but with a year like this the greenkeeper is doing a real job if he can give his members a satisfactory course and still keep under his depression appropriation. I feel it is foolish economy to neglect courses with the idea in mind they can be fixed up in a week, say two years from now.

I have been very successful here under our cut appropriation and feel it is due entirely to careful planning of work, using good seed, careful buying of supplies and above all using good, hard-working, experienced men on the course. I feel a good, experienced workman on the course is worth two of the other fellows who have to be told everything.

My men on the course are all experienced men and at the start of the season I told them just what we had to do to run the course successfully with our 1932 budget. They certainly have taken a big interest in everything to be done on the course and with their cooperation I have been able to make a real good showing.

O'Grady Has Brown Patch Trouble

By MICHAEL J. O'GRADY, Greenkeeper Country Club of New Bedford, North Dartmouth, Mass.

IN RESPONSE to a letter received from our President, John Morley, for some information on Eastern conditions, I am only too glad to convey to the readers of the NATIONAL GREENKEEPER what I can at this time.

This is without a doubt the toughest year that the greenkeepers have come to and probably will be the hardest on greenkeepers for some time. Everybody seems to think that business conditions are improving; we all hope so, as it will leave money more plentiful around golf clubs which means that the budgets will be a little bigger for the year of 1933.

I have been to about twenty of the best courses around my district this summer and, believe it or not, every greenkeeper I have met has his trouble and plenty of it.

The courses that I have seen this year with the exception of one or two have been visited with brown patch, both the large and small types. In most cases the small has been the worst. Different remedies have been applied and in some places have done a pretty good job on the large brown patch, but have not taken much hold on the small patch.

I haven't any doubt in my mind but the different fungicides are a pretty good preventative but if anyone will call any one of them a sure cure I would like to know which one it is as I have tried four different kinds and the results seem to be the same in each test. I have two greens that are located where there is very little air and I have tried Semesan and Nugreen every ten days during the hot weather. I think that I have it pretty well checked but even now they would not take a very good picture.

Some of the courses that I had the pleasure to see had been infested with both webworm and also the sod webworm. Some of the boys are using lead and some have tried kerosene emulsion and both the tests were successful.

On my own course here in New Bedford I am having a pretty hard time to keep it in fair condition as we have cut down on help, which means that lots of things that we would like to do have to stand for another time. I have eight men and one high school boy and we are kept moving all the time with four tennis courts and eighteen holes of golf course to keep.

I cut my greens at an average of four times a week instead of six, tees once a week where they used to be cut twice; traps and the rough are neglected somewhat also. Those things don't hurt in the long run as much as do weeds and watering of the putting greens if they are neglected.

Crab grass has been plentiful this season and has left quite a problem for the greenkeeper to get rid of as it is pretty hard to weed the small crab grass and leave any other grass. The large crab grass is not so hard to get rid of as it can be weeded by hand and the green will not look so bad afterwards. The only method to get the small is to scratch the greens with a rake and cut close after scratching, and while this may not do the trick altogether it will help to keep the greens true to putt on.

Greens that are infested badly with crab grass

generally when weeded make a very nice seed bed for bent to take hold when mixed with compost.

While the greenkeeper will always have something to scratch his head over I hope that his troubles will be less in 1933. I trust that you will find some helpful information in this.

Steubenville Had Webworms

By R. B. HILLIS, Greenkeeper Steubenville, Obio

Ours is a 9-hole public course, mostly on a hill-top, with tees for a background on most of the greens. The greens are Cocoos bent with good surface drainage, but no under-drainage.

We have had very little trouble with brown patch this season, but had plenty of trouble with large brown patch the previous season of 1931. Used Calo-Clor early in June when we had our first attack of large brown patch and continued to use same about every three weeks, about 1½ ounces to a thousand square feet. Discontinued this tri-weekly application after August 12 and had a light attack of large brown patch Labor Day on four of our greens.

Our greatest trouble this season was webworms and next crab grass. Tried the kerosene emulsion treatment for the webworm, mixing it in an electric washing machine. Had some success applying from a fifty-gallon drum through a one-inch open hose, letting the open end of the hose rest on the green and moving it slowly across a five or six-foot swath so as to flood the green a little.

Discontinued this method as our laborers are all social service workers and are a different crew nearly every day. Some were careless and applied too heavily in spots leaving scars which took a long time to recuperate in the hot weather. Since then we used a small spike roller with sixty finishing nails for spikes. As their burrows are not difficult to see before the greens are cut we lifted out a number using an ice pick to turn back the burrow or hole.

We had four crops of webworms this season. I believe the third was the worst or most numerous. This latter method would be rather slow. The caddies took an interest in getting the worms for a time and used to count them to see who got the most. The webworms seem sensitive to fertilizer

and during watering in of fertilizer quite a number crawl on the surface.

Tried painting the clover this spring with sulphate of ammonia, about a small double handful to a quart of water (do not give the weight as our scales were stolen). The clover died and the scars were soon covered with grass which naturally left dark green spots for a time. This is not practical in hot weather as the grass does not come in very fast. Used about eighty pounds of ground limestone to the green, four thousand square feet this spring.

Fertilized with complete fertilizer once a month during April, May, and June about 8-12-3 mix—sulphate, phosphorus and potash. Used about three pounds sulphate to one thousand square feet. Used no fertilizer during July and August.

Our greens were thick, the color good and the grass was fine of texture. They stood the wear well and did not look worn out around the cup after heavy Sunday play. We had some clover and quite a lot of crab grass this season.

The fertilizing program had something to do with the weeds. A little too much PH and K, but our grass was not mushy or weak as with too much N. Used no arsenate of lead this season for financial reasons. Could see no need as we did not have June beetle in the greens. Used arsenate of lead in 1931 and did not have much crab grass—it may be partly a control for crab grass.

Left the cuttings on the green most of the time this season, using a pole to brush them in when needed. Think it does more good than harm. When you throw away the cuttings you throw away fertilizer, topdressing and some protection from the sun.

Did not topdress so frequently this season, but used the roller more often—both spike and smooth roller. This was partly because I had no method of sterilizing the topdressing. All topdressing should be sterilized against weeds. Used Sorbex peat moss in the topdressing this spring. Was not very successful as we had a heavy rain after topdressing and the peat moss floated to the surface and did not look so good on the greens so dumped what I had left in the soil bed and turned it under.

It has been dry in the Pittsburgh district for the past three months. The clubs that do not have some system of watering fairways have their courses burned up and the ones that do have enormous water bills.

Firestone Courses In Good Shape

By HENRY PROVENCE, Greenkeeper

Firestone Country Club and Public Course of Firestone Tire and Rubber Company, Akron, Obio

In reference to your letter of September 7, as to how we managed to overcome the depression we kept both of our courses in fairly good shape. We have both a public and a private course, thirty-six holes in all.

We centered most of our work on our greens and tees. Every golfer seemed to be well pleased with them. We cut down on our labor but not on our fertilizer, as well as seed and minor equipment.

We had a few sod webworms on our public course that marred the greens a bit so I used forty pounds of arsenate and six pounds of sulphate with sand and they came along fine.

Summing it all up I did more figuring, thinking and harder work, as well as my men and I do not believe my two courses will be affected for 1933 along these lines as they weren't deprived of anything they required. I cannot see much better conditions for 1933 under these modern times.

Hall Uses Nitrate of Soda

By G. W. HALL, Greenkeeper

Cowansville Golf Club, Cowansville, Canada, Quebec

To EXPLAIN my troubles for the year 1932, I must say my Directors have been for cutting expenses since we first began the season. But I think they have looked on the dark side a little too much, as we shall not come out so badly.

The first thing they did was to cut my wages ten per cent and asked me to manage with one man and that I have done. I have been doing the work this season by myself with the aid of one man and kept expenses down.

The first thing I did was to get compost for my greens. I got it from a spare part on the course and got one hundred and fifty pounds of nitrate of soda to mix with it and derived great results from it and a saving of one hundred dollars of buying.

In July, because I had no time to make my own, I bought ten tons at five dollars delivered, and dressed my greens again and they have kept in great shape. Never had them better.

I have not had a complaint from the members or guests. There have been a great number from the States playing, and they told me the course was in wonderful shape.

For the fall dressing I have taken earth from the same place again instead of buying and that will be a saving of about one hundred and fifty dollars. I am mixing one hundred pounds of nitrate of soda with it again. I gave my bad fairways twenty tons of lime at two dollars a ton delivered. Of course what keeps my expenses down, I have a tractor with three-section mowers, also Worthington power mower for greens. My greens are a good size, 9-hole course, 2565 yards.

Slack Has Been Fortunate

By WM. SLACK, Greenkeeper University of Michigan, Ann Arbor, Michigan

In REPLY to your questionnaire on, How I Overcame the Depression of 1932—Well, I think that I can truthfully say that I am one of the most fortunate greenkeepers in the state with regards to expense as I have had all the men and material necessary to keep the University of Michigan golf course in first-class condition.

Not being in the habit of blowing my own horn as the saying goes, I base my statement on the condition of the course from the compliments paid to me by the many visitors who have played here from the different states.

Of course, I am well aware that if I had not had a crew of loyal men and plenty of material, I would have been in the same boat as some of the unfortunate men all around me who have not been blessed with all the facilities that I have had to work with, and I take this opportunity of congratulating them all for the condition that they have kept their courses in, as I have visited quite a lot of them and have marveled on the work they have done.

I further consider myself very fortunate in that I have had only a very slight attack of small brown patch on one green which is not worth mentioning, while some of my brother greenkeepers all around me have had lots of trouble. I think I can attribute my good fortune to this reason that since May I

have thoroughly disced all the greens every two weeks and watered in the morning.

I must say that I think I had a fair share of sod webworm and it sure kept me busy for a while, but after applying kerosene emulsion on some greens and arsenate of lead on others I gave them a shock at least for this year.

I cannot close without sympathizing with the greenkeeper who has had to struggle along with a shortage of everything. I trust this reply complies with our worthy president's request.

How I Beat the Budget in 1932

By JOHN DAVIDSON, Greenkeeper Wanango Country Club, Reno, Pennsylvania

THE greatest expense in maintaining a golf course is the labor and the most successful green-keepers are those who can manage the handling of their men, as well as understand the condition of their turf and know how to improve it without making any false moves.

I am on an 18-hole golf course on the side hills of Western Pennsylvania, where the soil is very thin, about a half inch to grow the needed grass on both greens and fairways. In spite of this the greens and fairways have improved wonderfully this year owing to a new watering system which enables us to water the approaches and landing places.

If a more extensive watering system had been provided the fairways would be in much better condition. But not so with our greens; we have to use the most uncommon thing in the world, common sense when watering them. I have had very little trouble with any pests or diseases during my experience as a greenkeeper, not even in 1928 when I was on another course or in 1931 on this course; two years which proved disastrous to many course maintenance men.

This year the Green committee allowed me the munificent budget of six thousand dollars on which to run the golf course. This meant that I had to cut the number of men employed to the minimum, so I hired five men, all good workers, and all willing to pull for the course.

One man mows the fairways, cuts the rough, and keeps two tennis courts in excellent condition. The other four men cut five greens each day and rake the traps around them. When that is completed these four men report where we left off the day before and working in gang formation the rest of the eight hours we cut the slopes of greens, the tees, do what topdressing is necessary and other odd jobs.

This gives each man a chance to see the other fellows' greens and to jest over the straight or crooked lines of the mowers or other things which come to their attention. We always have a little fun and plenty of work.

I worked with my men and then found time to grind mowers, keep the equipment in shape, run the gas engine for the water supply, and put on the sprinklers at night with two boys to fill in where necessary.

Before I took up the work here sixteen men were employed on the course at a cost of about \$12,000 a year. Most of the members tell me the course was never in better condition.

Berkshire In Good Shape

By THOMAS NOCKER

Berkshire Hills Country Club, Hartford, Connecticut

IN REPLY to Col. Morley's letter of September 7th, I want to make a short statement.

Starting the season of 1932 at the Berkshire Hills Country Club, the officials of the club cut all help from ten to twenty per cent—greenkeeper taking the lion's share in the cut, also cut the amount of men from six to four. But, seeing that I was the construction superintendent of the course and therefore had always a personal interest in the course I had to resort to every trick gained in my twenty years' experience in this country.

Despite all this we have had excellent comments from guests as well as from players in the New England P. G. Q., also the Berkshire Open.

I think that both workmen and greenkeepers should be entitled at the end of a successful season for the club to something more than just a lot of salved and empty promises.

Regarding the outlook for the season of 1933, we cannot see much improvement so far, but live in hopes of early prosperity for everybody.

Northeastern New York Greenkeepers' Association Meets at Saratoga Springs

By JACK GORMLEY

THE Northeastern New York Greenkeepers' Association held its regular monthly meeting on September 14 at McGregor Links, Saratoga Springs, N. Y.

In the afternoon a kickers' handicap tournament was played and many of the greenkeepers and Green chairmen participated. Mr. C. F. Bateholtz of Edison Country Club won first prize with a net score of 78 for the eighteen holes. W. Roy Smith of Stamford Country Club was second with a net of 79.

C. S. McBride, our secretary, was third with a net of 80, and fourth place was divided between A. G. Eede of Ballston C. C., and C. Stanford of Sir Wm. Johnston C. C. with net scores of 81. After the match dinner was provided at the Maplegrove Inn which is adjacent to the clubhouse. Approximately fifty persons were served.

We were very fortunate in securing as speakers three very well-known exponents of turf culture. Their talks to the greenkeepers were very educational and proved to be the greatest factor in making this gathering the most successful of the season.

The first speaker was a man whose name is familiar to nearly every greenkeeper in the United States, Mr. O. J. Noer—who spoke briefly on the ills throughout the northern section of the country, brought about in the last two years, by humid conditions, excessive use of water, untimely application of fertilizers, and the menace to healthy turf on certain greens, which artificial mounds and contours placed by some architects to make putting more difficult, promote.

Mr. Noer pointed out that the putting greens during the summer months must be considered as the most important areas and must be given the most attention. He remarked that while much over-feeding in the past has caused untold trouble, that during the past year in the interest of what is really false economy, many courses throughout the country were swinging the other way, and starving the greens. which ultimately would cause greater expense in rectifying their mistakes and much dissatisfaction created among club members. Mr. Noer concluded by impressing on the minds of the assemblage that the three essentials in maintaining good turf,

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Sharp until completely worn out.
Strong and slender
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are, soil conditions, feeding practices, and watering.

Dr. E. M. Horsfall of New York City, Entomologist of note, treated in great detail the fungus disease which is known as dollar or small brown patch. He produced many facts and figures on its control by both organic and inorganic mercury compounds. He also spoke about the white grub menace and various means of control with arsenate of lead.

DICKINSON EXPLODES A BOMBSHELL

PROF. L. S. DICKINSON, the last speaker, exploded a bombshell by his statements on pre-seeding fertilization (as observed from experiments at the Massachusetts State College), the vital connection that pre-seeding fertilization has with the relation between root growth and leaf growth, which must be maintained if healthy turf is to be grown. Briefly, he stated that in any pre-seeding, he felt that nitrogen should never be supplied, that potassium was not necessary, and in some cases where soils showed a lack of phosphorus they might be given a little super-phosphate.

His reasons for not fertilizing seem reasonable although there may be a marked difference of opinion among the growers of turf. He contends that for the first fifteen days that the seedling lives on the nutriment encased in the seed, and therefore could not use the fertilizer supplied before it had passed down too far in the soil to become available to the new plant. His conclusions were, that pre-seeding fertilization was generally harmful rather than helpful, and that since the seedling was unable to use food, other than that contained in the seed, until at least forty days after planting, that this procedure was both botanically and economically unsound.

He said that fertilizer had vital and necessary work to perform but not until the young seedling was well established and able to use the plant food they give.

In conclusion he remarked that the young seedling must be active, that they must send down their roots in search of food, and the providing of fertilizers too early makes them inactive, and their root systems thin and shallow in depth, and the heavy top-growth due to nitrogenous fertilizer which follows causes the plant to die from lack of foundation.

John Melville, president, thanked the speakers for their kindness in addressing the gathering, and also commended E. A. Nash and George J. Pulver, greenkeepers at McGregor, for their efforts in making the meeting one to be remembered.

Those present included the following: J. Jackson, E.

E. Miller, P. A. McTierney, and Jim Thompson of Mohawk G. C.; C. F. Bateholtz, Alec McIntyre, Bob Mitchell, L. H. Means, A. G. Knight, and C. S. McBride of Edison C. C.; John Lord of Antlers Club; H. A. York, Colonie C. C.; Mark Newton, Schuyler Meadows; Al Blanchard, Schenectady C. C.; Tim O'Connell, Luzerne Villa C. C.; T. H. Wiggins, Association Island Club; Paul Lynch and W. J. McGann, Frear Park Municipal Course; O. J. Swennsen, Troy N. Y.; Hugo Kuhne, Gloversville; C. Sanford, Gloversville; A. G. Eede, Ballston C. C.; Mike Ontkush, Mechanicsville G. C.; Sumner Olmstead and Roger Coulthurst, Grand Hotel course; D. F. O'Neil, Bomoseen C. C.; Jack Gormley, Van Schaick Island C. C.; John Melville, Troy C. C.; Sid Davis, Albany C. C.

The next meeting is scheduled to be held at the Van Schaick Island Country Club, Cohoes, N. Y., on Thursday, October 13.



Fred
Burkhardt
Says:

Our president, Col. John Morley, has called the regular Fall meeting of the Executive Board of the N. A. G. A. to be held in Cleveland, Ohio, September 26 and 27, instead of being held in November as formerly announced. Headquarters will be at the Hotel Statler.

The business sessions, held during this time, will be devoted solely to the affairs of the organization. There will be a joint gathering of the Board and the Cleveland District Association of Greenkeepers, which will mean that golf courses in the Cleveland District will be visited.

After the close of this Board meeting, definite information concerning the plans and committees for our Seventh Annual Convention and Show will be ready to be given to our members. So, watch for the next issue of the magazine for such information on our 1933 convention which will be held in Chicago, Illinois, January 31, February 1, 2, 3.

Make your convention plans early. Every member in our organization has a part to play in this convention, just as much as have those members who are selected to act as members of the various committees. The object of the convention is a more enlightened membership, a bigger, better, and more efficient organization.



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Write Today for Literature and Prices

Hurlock Goes to Chicago

The Worthington Mower company announces the transfer of J. B. Hurlock to Chicago, taking the position formerly occupied by John C. Dee. For the past two years Mr. Hurlock has been in charge of the Cleveland office and is well-known throughout northern Ohio.

Mr. Hurlock is succeeded in Cleveland by T. D. Wood, who will carry on the Worthington business with headquarters in the Hippodrome Bldg. Mr. Wood was trained in the factory of the Worthington Mower Co. at Stroudsburg, and was factory sales representative for the Philadelphia district.

Richland Greens Spiker

Announcement has been made by the Richland Greens Equipment Co., Farmers Bank Bldg., Mansfield, Ohio, of a new spiker for putting greens which has many unusual features. The spikes are the size of a lead pencil, made of heat-treated steel and should last indefinitely.

The Richland Greens Spiker consists of three sections of 7-inch face, 24 inches in diameter, giving a total spiking width of approximately 2 feet. To each of these sections is loosely attached fifteen heads and in each head are 12, ½ inch spikes, 1¾ inches long, spaced one and one-half inches.

The advantage of this new spiker according to the manufacturers is its low price and light weight. It can be operated in either direction and does not have to be turned around at each pass across the green, which means a great saving in time and labor. Two men can spike a 6000 square foot green, two directions, in thirty minutes.

Bear Cat Shovel

A new 3/8 yard convertible shovel, which is light enough to mount and transport on a heavy duty motor truck is announced by the Bearcat Shovel Works, a division of the Byers Machine Company, Rayenna, Ohio.

It sells for considerably less than any other shovel in the Byers' line, and is the result of this company's fifty years of experience in building excavating and material handling equipment.

The Bear Cat Jr. weighs 6½ tons complete as a shovel. This light total is practical chiefly because of the balance of machinery which eliminates all dead counterweight, its extremely simple construction which allows all parts to be amply rugged, and its freedom from crawler mechanism beneath the machinery deck.

The purpose behind the development of the Bear Cat Jr. was to produce a dependable shovel and crane, incorporating the latest engineering developments and efficiences, and also having a lower purchase price, lower operating costs and lower maintenance costs than ever before built into a machine of this type.