

machines, power mowers for fairway and tee and hand tee machines.

The day was crowded with the exhibition of machinery on one part of the course or another, and as a consequence more than one club official secured an idea of what was most suited to his course for 1931.

SPLENDID LIST OF EXHIBITORS

THE firms exhibiting in the show through Canadian distributors were: Rice Lewis and Sons, distributors of Pennsylvania mowers, Staude tractors, Universal compost mixers, Jacobsen power mowers, Hardie sprayers, Sherwin-Williams Company's arsenate of lead, Gunn's fertilizers and Rennie's seeds, the MacGregor compost distributor, the Universal compost mixer, the Lark golf sprinkler, the Whitehurst roller, the Buckner Manufacturing Company's sprinklers, lubricants of the Stewart-Warner Company and the National Equipment Company.

Edward Tippet, distributor for Jacobsen power mowers, Roseman Tractor mowers and Royer compost mixers.

Golf, Ltd., distributor for Royer compost mixer, the Toro equipment of all description, the Skinner

sprinklers, Milorganite fertilizer and the National Equipment Company's products; also the Staude tractor and the Superior sprayer.

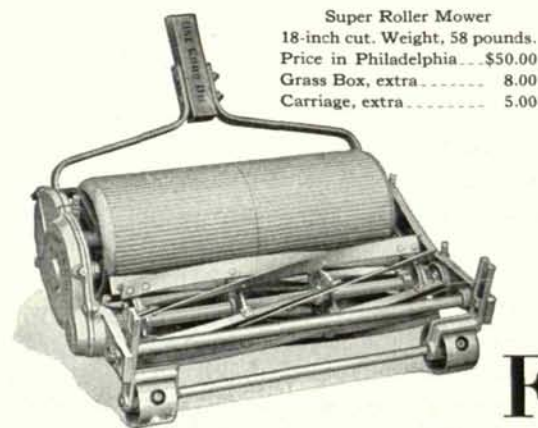
Andrewes, Mountain Company presenting Carter's seeds, The William Rennie Company and the Steele Briggs Company were also among the firms with representatives on the course.

The Worthington tractor for which John C. Russell of Montreal is the Canadian distributor had a prominent place in the show. It was handled with considerable skill by workmen and caught the eye of officials from clubs with wide stretches of fairway.

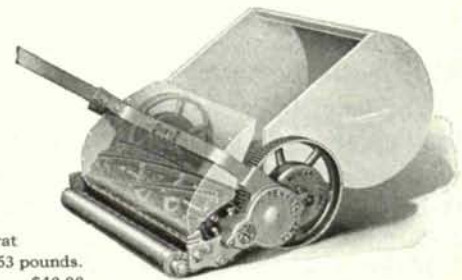
The Aikenhead Company offered the Ideal Triplex mower as a machine which could cut from 15 to 40 acres a day, clipping around obstructions as speedily and as easily as the smallest power mower.

In addition to these firms the Greenkeepers' Association enjoyed the support of Crane, Ltd., Page Hersey Tubes, the Imperial Oil Company, and the Steel Company of Canada.

The committee in charge of the exhibition was composed of W. J. Sansom, H. Hawkins, H. Lloyd, W. Kirby, F. Hamm, J. Austin, J. Stanfield, C. W. Freeman, A. McCallum, J. Abbot, J. Anderson and F. Haynes.



Super Roller Mower
18-inch cut. Weight, 58 pounds.
Price in Philadelphia...\$50.00
Grass Box, extra..... 8.00
Carriage, extra..... 5.00



New Aristocrat
19-inch cut. Weight, 53 pounds.
Price in Philadelphia...\$40.00
Grass Box, extra..... 8.00

For the delicate precision job of mowing golf greens—the hand-operated PENNSYLVANIA greens mowers

Back of every machine in the complete line of *Pennsylvania* Quality Mowers for Golf Courses is 53 years' experience in the building of the highest grade lawn mowers.

Write for further details and complete *Golf Catalog* showing *Pennsylvania* fairway mowers, the *Pennsylvania* Tractor, Tee Mowers and mowers for general trimming.

PENNSYLVANIA LAWN MOWER WORKS
1645 North 23rd Street, Philadelphia, Pa.

New England Notes

BY LLEWELLYN L. DERBY

ALTHOUGH matters are in a strictly preliminary stage, golfers of Holyoke, Mass., are cheered by the news that the mayor and city engineer have been scouting around for possible sites for a municipal course. Nothing is vouchsafed as to what parts of the city were viewed lest real estate prices take a sudden upward bound.

* * *

Numerous improvements are under way at one of Holyoke's courses, the Mt. Tom Club. Within the next few weeks it is expected that three new tees will be finished and all the other ones enlarged. The work is under the direction of Johnny Banks, the club professional. With the work on the tees completed, the greens which have been in better condition this season than for many years past, will be gone over thoroughly and put in first-class shape for next spring.

* * *

Mt. Tom's fairways, not sharing the fate of some New England courses this summer, are nearly as green as in the spring.

* * *

The Country Club of Pittsfield is soliciting members on a \$25,000 stock issue for improvements on its course. If 250 subscribers to stock at \$100 a share are obtained by October 1, work will be started in revamping the course at once in accordance with plans by Styles & Van Kleek of Boston.

The main object of the changes is to make the course less fatiguing. The present No. 5 hole would be eliminated under the proposed plan and a new No. 9 to end at the clubhouse would be built. No. 2 would be made into a sharp dog leg hole to the right.

If the project for changes goes through, the new layout will be ready in 1932. Samuel G. Colt is president of the club.

* * *

Since the making of more golf clubs means more golfers and more golfers mean more courses eventually, greenkeepers far and wide will be interested in the report from the offices of the A. G. Spalding & Bros. in Chicopee, Mass., that the company has enjoyed a 10 per cent increase in production over 1929 and that advance orders for the new lines going on the market September first exceed the number of a year ago. To suit the new balls which are larger and lighter and go farther, the cushion-neck steel shaft of the new club has a deeper blade and a little less pitch than before.

* * *

In connection with a low-priced putter the Spalding firm is putting out to compete for the 'Tom Thumb and miniature golf course business, William F. Reach of the company makes the prediction that 80 per cent of the persons now putting and driving on these little courses

will be playing on regular courses later. He looks on these little courses as potential agencies to inoculate a host of persons with the golf "bug."

* * *

Far be it from the writer to differ with Mr. Reach as regards his prediction of the number of persons destined to graduate to real courses as a result of inoculation by the "miniature" microbe, but if this happens it would seem as if our "great open spaces" would be converted into golf courses. So as not to be similar to the person who did not like olives because he had never tasted them, I tried this little game a couple of times, but perhaps being different it does not appeal to me as a lasting diversion.

From the recreative standpoint it does give one something different to worry about but from the angle of affording relaxation and opportunity to straighten out legs and arms that may have been cramped up all day indoors, concentrating on poking a golf ball through a drainpipe or over a one-foot water hazard seems to me to scarcely fill the bill.

* * *

The idea that is seeping over here from England, however, of courses perhaps half the size of the ordinary ones for people who do not have the time for a full 18-hole round appears to have merit.

* * *

Mention was made in the June number of the opening of a course known as the Riverside Public Golf Course at Boston, a trial venture in golf by the State of Massachusetts. It is owned and maintained entirely by the Commonwealth under the supervision of the Metropolitan District Commission. Greenkeeper Harold A. Mosher contributes some interesting data regarding this layout. The total yardage for the nine holes is 3,098.

The present course was originally land used as a reservation and construction started in July, 1929. In the fall of that year the greens were seeded to Rhode Island bent and the tees to Kentucky Blue and Red Top. The catch of grass on the greens has been good and although the fairways are still a bit rough, a good nine-hole layout is in prospect.

* * *

The Riverside course was opened last May and on the second day the full quota of three hundred memberships was subscribed. The yearly membership is very reasonable, \$20, and the daily green fee is \$1 except on Saturdays, Sundays, and holidays when it is \$2. Work on the course is somewhat handicapped because of the fact that men employed for construction or maintenance are under civil service requirements, and most of them for a six months' period only.

Greenkeeper Mosher extends an invitation to fellow-craftsmen visiting Boston to look over the Riverside side and give him their verdict, whatever it may be.

Creeping Bent Turf Ready to Lay Down

Hundreds of golf and country clubs, greenkeepers, landscape architects, parks, etc., utilize Illinois Grass Co.'s True Washington Strain Creeping Bent in solid turf form. Furnished in rolls ready to lay down like a carpet. Guaranteed to grow vigorously into a rich, green, velvety lawn if properly cared for. Also furnished in stolon form. Write today for prices and samples.

Illinois Grass Co. Department 370
18455 Reigel Road, Homewood, Ill.
J. A. Carter, Sales Agent, 75 E. Wacker Drive, Chicago.

The Belmont Springs Country Club was one of those hit by an attack of sod web worm about a month or so ago. The attack hit most of the greens but was more severe on some than others, the most damage coming on a couple rather wet ones and in velvet. Greenkeeper Parker, not equipped for spraying, applied a rather heavier dose than the usual 4 pounds of arsenate of lead to 50 gallons of water, and was able to check the worms very satisfactorily.

* * *

By the way, Parker is raising his own velvet bent seed, Kernwood strain, and so far it is a paying proposition while the present market price prevails. Germination is high and purity is excellent but some trouble is being experienced in cleaning it.

* * *

The September meeting was held at the Stoney Brae Country Club, Wollaston, September 2, and a number of the New England greenkeepers accepted the invitation of the Rhode Island body to join them at the meeting at the Misquamicut Golf Club, Watch Hill, R. I., on September 15.

* * *

On each hose-box at Misquamicut, Greenkeeper Jimmy Lawson has chalked down the number of square feet in that green. This sounds like a real help in applying chemicals and for other purposes.

* * *

The championship of the Greenkeepers' Club of New England will be played at the Brae Burn Country Club at the October meeting. The four medalists for July, August, and September will engage in match play to decide the champion, 18 holes in the morning and another 18 holes in the afternoon.

THE PEERLESS MOWER SHARPENER

The Peerless Lawnmower Sharpener is a wonderful but simple invention that sharpens all makes of Power and Hand Lawnmowers, scientifically—quickly—perfectly; does the work as nothing else can. It grinds a perfect bevel and clearance—no more hard-running mowers—no more pulling and tearing of turf. Operated by 1-3 H. P. Motor—attach it to your lamp socket.

Special Grinding Wheel Attachment for sharpening grass shears, sickles, scythes, axes, etc. Skate Sharpener attachment sharpens all makes of skates—including hockey. Earns money all the year 'round. Will save its cost the first season.



Hundreds of Golf Clubs, large and small, now use the Peerless Lawnmower Sharpener.

Write for Catalog and list of users

The Fate-Root-Heath Co.
925 BELL STREET
PLYMOUTH OHIO

NACO

"A GOLF COURSE FERTILIZER"



RESULTS PROVE ITS VALUE

GREENS that had regular feedings of NACO properly applied, remained in excellent playing condition throughout the summer months. The Potash in this complete, all organic golf course fertilizer produces a stand of grass that does not wilt under drought and the heat of the summer sun.

FAIRWAYS that were top-dressed with NACO in the early Spring showed remarkable improvement during the summer and proved for many greenkeepers the wisdom of "More Feed and Less Seed". The Fall application of NACO will last until next Spring for snow and winter rains cannot leach its organic Nitrogen from the soil.

NEW COURSES on which NACO was used in seeding and planting, developed in a few months a thick turf with a strong well developed root structure and a fine stand of wear-resisting grass.

NACO will make your fertilizer dollars pay dividends in improved turf. If unable to secure NACO from your Golf Supply House write direct to the manufacturers.

NITRATE AGENCIES COMPANY
104 PEARL STREET - NEW YORK CITY



How We Nursed Our Golf Courses

Letters from members of the National Association of Golf Clubs on preserving turf under extremely hot and arid conditions

MacGregor Hits The Nail On The Head

THE summer just passed was a duplicate of the summer of 1921 for drought. Fortunately we have a good water system, so were able to keep the course in very good condition.

There were two weeks when the temperature ranged between 100 and 107 degrees; those were anxious days and moisture seemed to disappear overnight. Altogether we watered the fairways nine weeks, twenty-four hours a day, throwing half a million gallons of water daily for the nine weeks, in all thirty-one and a half million gallons of water, which is a large amount of water to pump and distribute with a hose system.

The greens this year were sprinkled at night, nine greens each night and the results were very satisfactory. From observation would say night watering reduces the danger of brown patch; this accounts for the smaller amount of mercury used for control than in former years. We did not use mercury as a preventative but applied it immediately the disease appeared, the amount used being a quarter of a pound to fifty gallons of water per thousand square feet of turf; this amount was sufficient to control the disease.

This year less ammonium sulphate was used on the greens than in previous years and believe this is due to the fertilizer applied this spring. The greens held their color until well into the summer when light applications of nitrogen were given.



JOHN MAC GREGOR PUTTING AT SHOREACRES
This splendid course is in charge of Alex Binnie

The week of September 1st another application of fertilizer was given which will carry the greens over until next spring.

Over-watering must be avoided during the late summer, as a water-logged condition can easily result from over-watering.

The drought caused plenty of worry, but, on the other hand it eliminated the necessity of mowing the rough, which is quite an item in golf course maintenance.

Incidentally, our maintenance costs are lower than in previous years. Sometime during the winter when the nights are long I will write more about this.

JOHN MACGREGOR, *Greenkeeper,*
Chicago Golf Club, Wheaton, Ill.

* * *

Shawnee Fared Well

REPLYING to your request, "How We Maintained Our Golf Courses in 1930," would say, we have nineteen greens of the Metropolitan Bent. We have our own nursery and started to rebuild the greens in 1925—putting them into Metropolitan Bent and completing the course in 1928. After the greens were planted and started to grow, we topdressed every week for eight weeks. We now have a root growth of six to nine inches deep.

In the fall we allow our greens to get long, and about the last of October topdress with two yards of compost and from thirty to fifty pounds of sulphate. This spring we topdressed and put on one hundred pounds of 8-5-3 to the green, sulphating once each month eighteen to twenty pounds to the green. We topdressed again in June and August. Through the drought we watered greens every morning, which required six men of the eight employed on the course.

We have two Jacobsen power mowers and cut greens $3/16$ inches. We chain-mat greens when the dew is heavy in the morning and do not water.

We had the P. G. A. Qualifying for the State of Ohio, August 11, and they pronounced our greens almost perfect. We belong to the Central Ohio Golf Association and have had many visiting mem-

Through The Past Summer's Drought

greenkeepers of America describing ways and means of
drought conditions. Fairway watering is coming.

members from distant parts of the state and also other states and all have said it was one of the best conditioned courses in the state and elsewhere. And this has been an exceptionally dry season and we get no water to our fairways.

I am a Charter member of the National Association of Greenkeepers of America and invited all members to visit our course both for inspection and a helpful exchange of ideas and the solving of problems peculiar to every greenkeeper. I hope every greenkeeper has fared as well this season as we have.

CLOYD REICHELDERFER, *Greenkeeper*,
The Shawnee Country Club, Lima, Ohio.

An Emergency Watering System

THIS year has been one of the most disastrous in greenkeeping since I have been in the game, which is twenty years more or less. Even to those clubs with water systems it was a hard problem to keep up with the terrific drought.

It hit us hard because we had no water system until August. My fairways were not of the best although we seeded spring and fall and manured every fall for four years. Very little results were seen until spring because we had no water to take care of them in the blazing hot months of July and August. They baked out hard and dry and all young grass, or at least sixty per cent of it was burned out; thus we always had thin fairways no

matter how we fertilized and seeded. It is my opinion that every one of us will be a back number without water.

It is not necessary to hold back because you can't afford to spend thirty or forty thousand dollars. Take the very difficult position we were placed in this summer—our fairways were fast drying out and impossible to play. With the ground hard and the grass gone Nature took command and sought to heal the sores in the form of dirty weeds.

Our chairman said we must do something to overcome this terrible condition and he told me to measure up all the fairways and give him an estimate of pipes and fittings. In less than two weeks I had sprayers going on the fairways.

Now I can hook up eight sprayers to every fairway and we did it all with my usual crew and without extra men. I can say it has done wonders as all my fairways are back and we are cutting them every day.

We have seeded all fairways and topdressed with good soil, using over eight hundred tons screened with a Rotary gasoline screener and much of the seed is up now.

The two greens built in the fall of 1929 and seeded with Cocoas bent were opened on Decoration Day and have been cut every day since. They are beautiful and have never needed weeding.

Finally, I don't mean to infer that my water system is in any way as good as the \$20,000 outfits,



SULPHATE A GREEN IN TWENTY MINUTES
Joseph Ball uses this outfit at Chartiers Heights C. C., Pittsburgh, Pa.



ROTARY SCREEN USED AT CHARTIERS HEIGHTS
Notice how fine the soil is. This was used for topdressing fairways

but to those clubs less fortunate in finance than the larger ones it has been successful as an emergency measure.

JOSEPH BALL, *Greenkeeper*,
Chartiers Heights Country Club,
Crafton (Pittsburgh), Pa.

* * *

Shave Installs Water System

I EXPECT the season of 1930 will stay in our memories a long time as being the driest and hottest we have ever experienced. Around the Detroit district it was very bad, as our summer of 1929 was very dry but not so hot. I'll gamble that I have not had seven days rain all in all from June 15, 1929, to September 11, 1930.

We lost lots of grass on our fairways last year and this year a great deal more. We drilled a well last year that gives us three hundred and fifty gallons per minute for as long as we like to pump it. We were very fortunate to have it as we sure needed lots of water this year.

Our greens and tees have been in as good condition as they have ever been but it sure took lots of water and very judicious and close attention to fer-

tilizing, just give them enough to keep them slowly coming.

In July our fairways were crisp, hardly a blade of green grass on them. We decided to do some watering and see how our members would like the change. Our main and branch lines to greens and tees were located so nicely that we only bought three thousand feet of pipe and now we can and do water all our fairways.

We use twelve sprinklers with two hundred feet of hose to each one. Each sprinkler covers six thousand square feet and we leave them one and one-half hours in each place. It's certainly a treat to see green fairways again, as our members say after playing courses without water on fairways: "It's like a bit of heaven." This is on the South course; now I am going to put in four thousand feet of pipe on the north course and water the fairways which, especially on the hills, are nearly all dead. I am discing them both ways, fertilizing and seeding, chain harrowing and rolling, and will water beginning Monday, the 22nd, unless we get some rain.

I believe that fairway watering is very good providing that it is done in such a way as to be something like a good rain, that is they should not be watered continuously as it does not rain every day and night. I believe a good soaking once a week is fine and you won't get very much clover in them. I have seen fairways that have been watered every night and sometimes every day and goodness what a nice crop of clover and you could hardly find any grass. It's just as important to water fairways properly as it is greens and tees.

HERBERT SHAVE, *Greenkeeper*,
Oakland Hills Country Club, Birmingham, Mich.

* * *

Lakewood Had Plenty Of Water

I HAVE had wonderful success with the Lakewood course this past summer, although we sure had six weeks of hot and very dry weather. Even so we managed to keep the course in first-class playing condition and I didn't do one thing with my greens except to watch the watering of them.

All my watering was done at night during June, July and August. During these three months I didn't use any topdressing but I did use sulphate of ammonia, applying one application each month. It seems to me some of our greenkeepers use too much topdressing during the summer months when the

BUCKNER SPRINKLERS

Defy Drought!

Old Demon Drought was licked to a frazzle during the past summer wherever Buckner Sprinklers were installed. Tees, greens and fairways were kept gloriously green and club members waxed enthusiastic over constantly perfect playing conditions.

Is your course sprinkled by Buckners? If not, let us tell you why it should be.

BUCKNER MANUFACTURING CO. FRESNO, CALIFORNIA

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EASTERN ENGINEERING REPRESENTATIVE

Wendell P. Miller & Associates, Columbus, O.—
Chicago, Ill.

weather is hot and dry. I believe you can overfeed the grass and make it grow so fast that it naturally smothers itself.

The tees and the fairways were kept in first-class playing condition through the summer because I could get plenty of water to my fairways and greens. In this respect we were most fortunate.

I hope I will be able to see you all this winter at the Columbus Convention and send my best regards to all.

E. M. MONROE, *Greenkeeper*,
Lakewood Country Club, Edgewater, Colorado.

* * *

Gumbo Soil Cracks Badly

I AM going to try to reply to your letter in regards to this year's drought and how we came through it. As this is the first article of this kind I have ever written, do not expect too much.

Our fairways, the soil of which is pure gumbo, have suffered a great deal. In fact they are so badly cracked in some places that a ball could roll down out of sight. The only fairway we had a chance to put water on was the eleventh. Consequently that is the only fairway on the course in good shape. I think the showing there will convince the members of this club of the advisability of putting in a fairway watering system.

Have experienced no trouble in keeping our greens and tees in shape although it has meant constant watering day and night.

As we have had plenty of rain the last two or three days I expect no more trouble as far as drought is concerned.

DONALD T. JOHNSTON, *Greenkeeper*,
Niakwa Country Club,
St. Vital, Winnipeg, Manitoba, Canada.

* * *

Golden Valley In Good Shape

I WANT to contribute a few lines to your magazine and want to state briefly that we have been rather fortunate this summer considering the terrific drought. Having good support from my chairman we have managed to keep Golden Valley a marvelously conditioned course all season.

We have been able to give our greens, tees and fairways plenty of water although at times our water supply was very low. We have a flowing creek from which we pump our water with two centrifugal pumps with a capacity of five hundred

gallons per minute. These pumps have been runnings continuously day and night during the dry spell.

We raked our greens about the middle of July and then applied from one hundred to one hundred and twenty-five pounds of Milorganite to a green with a top dressing composed of one-third peat and one-third heavy soil. About three weeks later we sulphated, using about four pounds to a green. The tees were treated the same as the greens.

I cannot say that this process has made our greens immune from brown patch but am pleased to state that I have not been troubled with either brown patch or crab grass.

MIKE SANKO, *Greenkeeper*,
Golden Valley Golf Club, Minneapolis, Minn.

* * *

A Lucky Greenkeeper

I HAVE been asked to send in a statement, telling, "How we maintained our golf course during this summer's drought."

I was one of the lucky ones for our course is equipped with city water and plenty of it. Our greens and tees were in the finest condition all this summer. Of course, the fairways suffered the loss

7

THE LARK SPRINKLER

4



**Preferred because it
always sprinkles EVENLY**

The LARK sprinkles EVENLY from center to outside circumference on any pressure. Big drops that dig out top-dressing are eliminated by a small spray screw. The LARK has no complicated parts to wear out. That is why it is always ready for use.

And it must satisfy or you needn't keep it. You can try the LARK for 15 days. If it isn't better in every way, return it and your money will be refunded promptly. Price \$15.00 each in the U.S. Write for details.





L.R. NELSON MFG. CO.
PEORIA, ILLINOIS



Are Your Sprinklers Dependable?

The Buckner number 6 is positive in action, fool proof, and guaranteed to give satisfaction, will give more water over a larger area than any sprinkler we know of.

OUR HOSE PRICES ARE RIGHT

SEMESAN — NU-GREEN

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CORROSIVE SUBLIMATE

Exceptional service given on above orders

J. Oliver Johnson, Inc.

World's largest golf course equipment house

Morgan Huron Superior Sts.

CHICAGO, ILL.

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Bent Greens

You can have Scott Greens regardless of whether your preference be Bent Seed or Bent Stolons.

We are prepared to supply the very highest quality of seed in the several well-known strains. Careful recleaning over our own mills insures freedom from weed seeds and waste matter.

From our own Nursery we can supply the Genuine Washington Strain of Creeping Bent Stolons. Ask for the names of clubs in your locality that have greens produced from our Bent.

For your fairways which have doubtless suffered from the severe summer, we suggest Scott's Seed. Ask for quotations on New Crop Kentucky Blue Grass, Redtop, Chewings Fescue and any other grasses in which you are interested.

Write, wire or phone for prices. Play safe with Scott quality. 1100 other clubs do.

O. M. Scott & Sons
Company



Marysville,
Ohio

of water a good deal, because we have no means of watering them.

At the beginning of this season, we began by having two men do all the watering at night. But because of the inconvenience due to having no light, the two men could not water the eighteen greens, sufficiently well, to keep them in the best of condition. So now, we begin work, in the morning at five o'clock. Each man has two greens to water, and each green is watered from forty-five to sixty minutes every day.

Approximately every six weeks I use one hundred pounds of Milorganite, to the green, for top-dressing and find that my greens stand up wonderfully well, considering the amount of players. We have on the average of three-hundred and fifty players daily, and they tell me that my greens are in as fine shape as those on private golf courses.

I also use sulphate of ammonia once every month on the greens and find that with these three helps, I have overcome the drought of 1930.

JOSEPH KLEBBA, SR., *Greenkeeper*,
Rackham Municipal Golf Course, Detroit, Mich.

Anderson Used Humus

I HAVE a very poor water system and in order to conserve what moisture I do have I use lots of humus in any form on both tees, greens and fairways. I don't know of anything better. Of course, a greenkeeper must use his judgment—on a season with lots of moisture he would have to cut down on the humus for his greens.

JOHN L. ANDERSON, *Greenkeeper*,
Cedar Brook Golf and Country Club,
Scarboro, Ontario, Canada.

Drought Delays Opening Course

WE DID not open our 18-hole course this year on account of the two and one-half month's drought and we thought playing would harm new seeding on fairways, so we plan to open next June.

The only trouble I had this year was small brown patch for which I used Semesan.

My greens and tees are in good condition now and with our one hundred thousand gallon tank and fairways piped I kept the fairways in fair condition.

I have twelve men and five women on golf and nine men on gates, parks and roads. I enjoy reading your NATIONAL GREENKEEPER.

D. K. DAVIS, *Superintendent*,
Day Forest Estates, Glen Arbor, Mich.

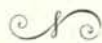


Golf Course Construction

from the Greenkeeper's Standpoint

By EDWARD B. DEARIE, JR.

Noted Chicago Greenkeeper and Golf Course Architect



CHAPTER VII—Landscaping the Golf Course

LANDSCAPING should be the frame to a finished golf course picture of both beauty and charm. To bring additional beauty to satisfactory country club property by artificial means, although the result will seem natural, is the purpose of landscaping.

The attractiveness of a golf course always increases its charm. Hours spent in congenial surroundings are likely to be more pleasant. Satisfactory links test the skill of the golfer under harmonious surroundings where the cares and worries of every-day life can be forgotten.

Beauty should be the keynote of the landscape design. Generally this may best be obtained by simplicity and a careful avoidance of an appearance of artificiality. The golf course is a haven of refuge where the golfer may forget regular cares and enjoy fresh air and sunshine in congenial environment. Although the property may be located in a city, the surroundings should make the golfer forget the worries of city life. Shielded by vine-clad fences or rows of hazel or hawthorne trees, the premises may be isolated completely and a new world may be created upon the golf course, a world which will provide the golfer with inspiration.

Permanent development is just as desirable in landscaping as in any other feature of the property. Cheap, rapid growing and short-lived trees and shrubs are neither economical nor satisfactory. They seldom reach perfection and soon must be replaced at additional expense. It is better to make fewer but more satisfactory plantings each year according to the funds available. Results are likely to be much more gratifying.

LANDSCAPING SHOULD BE PLANNED EARLY

GENERAL landscaping plans should be formulated by the club even before the course is constructed if possible. Usually the golf course architect will be able to explain from the approved design which features of the landscape are to be retained and developed and to visualize the appearance of the completed course.

Desirable nursery stock in sufficient quantities to landscape a golf course is not always obtainable at every nursery. Haste should be avoided and a little shopping is recommended. Frequently it may be necessary to visit several nurseries and sometimes to make arrangements to have nursery stock delivered from considerable distance.

After purchases have been made, they should be left at the nursery until time for actual transplanting. This should be done by the nursery man whenever possible as he is familiar with the care which his stock requires and will be interested in supplying the club with the best of his products for advertising reasons.

Sometimes it is possible to purchase fair-sized trees which are not wanted because they are on building sites. The job of moving a mature tree is hard but it is not at all impossible. The experienced tree mover usually digs a square trench about the trunk and boxes the soil about the roots. For medium-sized trees it is easier to dig a trench about three feet deep around the tree about five feet from the trunk. After the soil has been loosened, planks are placed under the roots and the tree is pulled over on to a wheeled drag.

The roots should be thoroughly saturated before

the tree is moved and the soil should be kept from falling off the roots. Burlap should be wrapped around the portions of the trunk likely to become injured in moving. After a tree has been replanted, its roots should be thoroughly watered and its trunk should be steadied by guy ropes to prevent it from being blown over before it has become established again.

To make the most of every attractive vista should be the endeavor of both the clubhouse architect and the golf-course architect. They should co-operate so that both the view from the clubhouse upon the course and from the course to the clubhouse will be as perfect as possible. The clubhouse should be built upon a site which will set it off to the best advantage. The surrounding landscaping will add to the perfection of the picture.

BEAUTIFUL APPROACH IS GREAT ASSET

A BEAUTIFUL approach to the clubhouse is a tremendous asset. Driveways lined with well-kept shade trees may be further beautified by plantings of dogwood, redbud, wild or rambler roses or Japanese honeysuckle. Pivet hedges are usually satisfactory for bordering walks. The approach should not be neglected because the impression of it is the first received and usually the last forgotten.

Around the clubhouse the chief aim should be to create an atmosphere of natural charm, free from any appearance of artificiality. Attention should be paid not only to the selection of trees and shrubs but also to their placing so that they will be set off to the best advantage. Mass plantings of mock orange, *opulifolia*, common lilac, red and yellow dogwood, snowberry and honeysuckle are always in good taste. Plants, which are indigenous to the locality, are preferable to exotics which may not bloom in the environment with full beauty.

Wild flowers are often lovers of shade and many of them will grow with little encouragement. Seeds of wild flowers are somewhat difficult to obtain and usually need special treatment before being sown. Holly and dogwood have such a hard seed coat that it is usually two winters before they germinate. Wild rice and gentian seed will not grow if allowed to bake out. The best method is to transplant the growing plants from nearby sections where the climatic and soil conditions are similar to those on the course.

ANNUALS AND PERENNIALS

FOR areas not too densely shaded there are a great many wild herbaceous annuals and perennials. Among them may be mentioned violets, blue-eyed Mary, Virginia creeper, golden ragwort, *hapatica*, bloodroot, anemone, phlox, trillium, bluebell, wild geranium, phacelia, May apple, twin-leaf, spiderwort, stonecrop, toothwort and larkspur.

If leaf mould or acid soil is available, maidenhair fern, wild ginger, trailing arbutus, violet wood-axalis, partridge berry, bunch-berry and lady's slipper will grow luxuriantly. Moss pink, saxifrage, rockcress and red columbine are especially adapted to rocky areas.

The type of wild flowers to plant in open meadows depends upon the moisture and condition of the soil. If the ground is naturally inclined to be damp, dog-toothed violet, cardinal flower, gentian and rose pink are suggested. If the subsurface is peat or the soil is acid, it is possible to grow wild orchids. Dry soil will grow a great many varieties of wild flowers such as fox-glove, California poppies, asters, evening primrose, Mariposa lily and lupine. In addition, plant pokeberry, bayberry, hackleberry, buffaloberry, crowberry, huckleberry, blueberry, juniper, madrone, mazanita and such bushes to attract birds.

The parking space, utility buildings and any undeveloped areas should be never be visible from the course or the clubhouse. Vines, such as honeysuckle, morning glory and wild rose, should be encouraged to cover fences. Tall shrubs or trees may be used most effectively for screening purposes and will do their share to add beauty to the property as a whole.

GOLF COURSE NOT A PICNIC GROUND

A GOLF course is not a picnic ground and there is seldom any occasion for planting a small forest. A few trees well placed usually are more effective than many trees too close together. There are a number of very desirable trees for golf courses. Among them may be mentioned the maple, oak, elm, hickory, ash, tulip, poplar, walnut, beech, birch, wild crab, hawthorn, black cherry, yellow wood, buckeye, gum and cedar.

The most desirable trees are those which have straight trunks and branches from seven to nine feet above the ground at maturity. In the Middle West, Norway maples, American elms, sweet gums,