

# How We Nursed Our Golf Courses

Letters from members of the National Association of Golf Course Superintendents 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.

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## 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 top-dressed 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 dealing with 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

**T**HIS 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 Cocoos 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.

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### 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.

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### 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

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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.

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### 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.

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### 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.

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### 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

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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.