

Greensmen Tell What Courses the

By JOHN ANDERSON—J. O. CAMPBELL—ERICH PAHL

Prepare Well Ahead for 1930 National Open

By ERICH W. PAHL,
Greenkeeper, Interlachen C. C.

WE started the season as usual, with top-dressing and fertilizing the greens and tees, after which we proceeded to fertilize our fairways.

The fairways had never been treated before, and were sorely in need of fertilizing, clover having come in quite heavily



Erich Pahl, Interlachen's prized greenkeeper.

in most fairways. We applied 30 tons of Milorganite and 6 tons of ammonium sulphate, being put on at the rate of 40 pounds Milorganite and 10 pounds ammonium sulphate per thousand square feet, and being applied with an end-gate lime spreader. The job did not take us very long, and after the first rainfall the change in color and the thickness of the grass was remarkable.

The effects of this one treatment lasted all summer, so we are planning on the same treatment for next year.

With the exception of caring for the U. S. G. A. demonstration plots, which were planted on our course a year ago last September, our work was the regular routine work until the latter part of June, when my chairman, C. E. Van Nest, got back from the national Open at Winged Foot. Then we began plans and construction of several new tees and bunkers for

the delight of those who will assemble here next July for that great classic, the 1930 national Open.

We built three new tees, and enlarged and raised two others, and put in eleven new bunkers just where they would do the most good. We just got our tees surfaced when I was notified that the state Open would be held at our club the following week, and they wished to use the new tees.

Rush Work on Tees

We were going to rebuild our practice green, so immediately got busy taking up that sod and laying it on the new tees. It took us about two days to cover the tees. A thorough soaking and rolling and they were ready for play on Thursday when the play opened, and we had no complaints because of imperfect tees. I considered myself lucky to get them in such good playing condition on such short notice.

The practice green was then remodeled, new drain pipes installed, surfaced and planted with six different strains of creeping bent stolons that are doing the best in this locality and one plot of Cocos Bent, this being done to get a check on the best strain for resistance of the various diseases and the best putting surface. A similar plot, though not so large, was put in on a north slope to test out against winter exposure. All in all I believe that this is going to be of great value to us and other clubs in this locality in years to come, so no mistake should be made in the selection of a grass for putting greens.

Our greens are at present planted with Virginia strain creeping bent, and in order to fine up the surface for next summer's play we are going to give them a thorough raking first thing in the spring, then seed in about twenty-five pounds of Cocos bent, then apply a coat of top-dressing and fertilizer. With good weather to start it off, I can see no good reason why our greens should not be in first-class shape for the tournament in July.

All this preparatory work being done

1929 Work Did Their Most Good

HARRY HANSON—F. J. ROTH—ELMER AFFELDT

this year leaves only the finishing touches to be done before the big tournament. One thing about the work we did this year is that it does not affect the average player in the least, but will affect the long shooters plenty if they get off the line.

One particular piece of work we did that we are all proud of is the improvement of the passage from the tenth green to the eleventh tee, which became necessary on account of the increased traffic on the highway which it crosses, and to my chairman goes the credit for the plans of the layout. A distance of about one hundred and fifty yards, the player walked down a slope, then uphill to the embankment of the road, where a stairway was built, then across the highway and up an easy grade to the tee. Many were the complaints on the stairs. In building the new eighteenth tee we needed dirt, so why not dig a ramp in the bank, which we did, and also put in a fill in the hollow to make the walk more level. The new tee fits into the scheme perfectly, with a walk branching off the main walk up to the side of the tee. The surroundings were landscaped with shrubbery and elm trees, and should show up beautifully the coming summer. We have eliminated complaints on the walk.

The new fourteenth tee is another job that adds so much to the general appearance as the player goes around, it being built up among the trees on the edge of a beautiful lake we have bordering the property. It provides a wonderful view of the lake, and with the shade of the trees at all times it will be a fine spot to take a minute's rest on our hot summer days, as no doubt many of GOLFDOM'S readers will agree during the coming summer.

A good bunker may be described as one that retains the badly-played ball which it was designed to catch, leaving it in such a position that the player has a reasonable chance of recovery. It should suit the position it occupies, insomuch that it has a natural, not artificial appearance.

New Greens Feature First Year

By HARRY HANSEN

Greenkeeper, Maple Bluff, C. C.

STARTING my first year here I found four greens were under construction and two tees were being built. The greens were

graded in the fall of 1928, so had plenty time to settle. First we tilled the greens. Then we put 8 inches of equal parts of black soil and sand over the entire green. Next we put 3 yards of milorganite; this we raked in thoroughly and leveled, and then sodded with Washington Bent.



Harry Hansen, in command of Maple Bluff greens job.

After being top dressed twice, these new greens were ready for play in eight days, and were in excellent condition for the state tournament.

In the fall we constructed a new green and fairway. This we did when work was slack, so we did not have to hire any extra help. Where we could not use the tractor we hired a team for a few days, and in this way we built the green and fairway for much less money than it would have cost otherwise. We also constructed a tee in this manner.

I had several attacks of small brown patch last summer, but by watching the greens carefully every day I was able to check it at the first signs before it had time to develop. I used one pound of Semesan to 50 gallons of water, and 50 gallons of water to each 1,000 square feet.

One Man on Nursery

There was a small nursery here when I came. It was just enough to do patching



The second line of defense are these traps guarding the eighth at Interlachen.

with, but now we have one big enough to sod six large greens. I have one man who weeds, waters, cuts and top-dresses the nursery. Half of the nursery is Washington Bent, and the other half I got from a fellow greenkeeper in the eastern part of the state. This bent has no name unless we call it Wisconsin Bent after its native state. This bent is fine and is dark green in color. It has not been subject to brown patch as long as I had it, although I did have a touch of brown patch on the Washington Bent right next to it.

Mr. Gilbertson, the greenkeeper who gave me this bent, said he never had brown patch on any of his greens as long as he has been with his club, some 18 years.

Avoids Brown-patch

I do not believe in much dosing of chemicals on my greens. The fertilizer with which I have had the best results is cottonseed meal mixed with equal parts of blood meal and dried fish. Twenty-five or 30 pounds of this mixture mixed thoroughly with one yard of compost makes an excellent top-dressing. If this top-dressing is put on your greens the first part of June it will carry you through the brown patch season without feeding your greens too heavily.

I have been very busy the last month



Back in the woods in the eighth at Interlachen with "the jungle" for wild shots.

repairing my machinery and getting it in shape for spring. We have a Peerless mower sharpener, and with it I keep my fairway and green mowers always in A No. 1 cutting condition, with a large saving of repair bills.

Have Warm Work Shop

I believe all greenkeepers should have a warm work shop, so they can repair and repaint all their mowers, benches, flag poles and other equipment so everything is ready for use in the spring.

Keeping things painted and ready for use improves their looks and worth, and saves many bills. An old rusty piece of machinery is a lot of worry and grief, for



This is the Interlachen clubhouse that will be headquarters for the 1930 National open.

you can never depend on it when most needed.

I know there are a lot of greenkeepers who cannot do things the way they would like as they have not the co-operation of the chairman or greens committee, which is very necessary.

It is a pleasure to state that I have one of the best chairmen I ever worked for.

Cleaning "Jungle" Keeps Good Men Thru Winter

By JOHN ANDERSON

Greenkeeper, Crestmont C. C.

WHEN the playing season is over it is the rule at most clubs to lay off the maintenance staff, with the exception of the greenkeeper and perhaps one handy man or, in some cases, two men, who may do a little painting, snow shoveling or make slight repairs to equipment, as the case may be. Some who are fortunate find other jobs; others hang around all winter waiting for the course to open again next spring.

Very often when spring comes the greenkeeper is called upon to make some improvements, such as draining some wet



The seventeenth tee at Interlachen is in the foreground. The green you see is the sixteenth.

spots in the fairways, cleaning up some rough between parallel fairways or often, and more important, cleaning out the woods alongside fairways which were left in their natural condition when the fairway was cut through them. These woods cause a lot of inconvenience to members and their guests, especially from lost balls. There is delay from the players having to throw the ball out if they are lucky enough to find it and from holding up play right through a busy week-end. I find much of this work can be done during the winter months, sometimes more efficiently and economically than it can be done during the playing season.

At Crestmont we are fortunate in having a clear-thinking, understanding green-chairman, who, in the face of some criticism, has given me a free hand to utilize from six to eight of our best men each season during the winter months as the weather and other conditions warrant. During the last three winters we have cleaned up most of our rough between parallel fairways so that it is now in a condition to be mowed once a week, with the fairway units raised a half inch above fairway cutting height instead of being cut once a month or so with hay mowing machinery. In addition, we have cleaned up most of our woods fifty to sixty feet in

from the fairway, taken all dead wood out, cleaned up all stumps and stones, filling the holes up and leveling up and having these places in a condition permitting a ball to be played out.

In this way we have done much to improve the property of the club, the speeding up of play, and gained the confidence of many of our members who do not understand those conditions, but wonder what is the matter when they and their guests have to spend half an afternoon looking for their ball in the woods. This work is done by the picked men of the crew, who do not have to be shown what to do and how to do it. Consequently, we give the club more per dollar spent. The work is done at a time when the greenkeeper has more time and nothing else to demand his attention, and the best of his crew have a year round job, which makes them very much more efficient.

Screened compost is mixed under cover with poultry manure, allowed to heat, turned several times; possibly heat kills weed seed in compost. Is the resultant loss of ammonia compensated by killing of weed seed? Several of New England greenkeepers' members are trying this method. What do you think?—*N. E. Greenkeepers' Newsletter.*

Crying Need of Drainage Answered on New Job

By J. O. CAMPBELL

Greenkeeper, Wethersfield (Conn.) C. C.

WHEN I came to the Wethersfield (Conn.) C. C. March 1, 1928, the club had been in existence about 12 years without a greenkeeper.

The first problem was drainage. The members had never been able to play over a number of the fairways without rubber boots until late in the spring. Naturally they were anxious to see that condition changed as soon as possible. About half of our fairways are low and wet. There is still plenty to be done, but I have accomplished quite a bit which the members appreciate.

The lower half of No. 6, which leads down to our water hazard, was particularly bad. The chairman of the green committee and the writer started to walk over the course. When we came to No. 6 we found our galoshes were not high enough to keep our feet dry. We decided to start our drainage program right there.

This is the way I put in the drainage and it has been very satisfactory: We dug our main ditch 14 in. wide and 32 in. deep diagonally across the fairway running five laterals into it. In all there was about 500 ft. of ditch. We laid 4 in. glazed bell tile, with the bells against the drainage, covered the tile with burlap bags, then filled the ditch to within 6 in. of the ground level with 2-in. stone. We covered the stone entirely with burlap bags, then filled the ditch with top-soil which I had placed to one side for that purpose.

Old Job Went Bad

I find that in laying tile if the top-soil is placed over the stone one gets better drainage as this soil is much more porous than the soil brought up from a greater depth, and burlap bags prevent loose dirt from filtering into the tile. The glazed tile doesn't freeze and break as does the soft tile.

When I put my drainage across these fairways I found where the old drainage had been put in; 3-in. soft tile had been used. It was badly broken and filled with dirt. It takes 4 in. tile about 3 times as long to fill up as it does 3-in. tile and the cost is but a few cents more. We find our cost of drainage is running about 50 cents a foot, including labor and materials.

Running across No. 1 and No. 18 fair-

ways was an open ditch which provided drainage for approximately 20 acres. In these fairways we used 12-in. tile, 48 in. deep, for our main line, using stone and burlap bags as we did with the smaller tile.

Drainage Work Pays

On No. 2 fairway there was a wet weather spring, which was active until the first of June. This spring came out about 225 yards from the tee. I sank a small well 4 ft. square and 3 ft. deep in this spring, and filled it with stone. I then laid 4-in. tile down to my main drainage line which ran directly across the fairway, into an open ditch which extended across the rough, emptying into a deep swale. This swale gives me a permanent outlet for my drainage. No. 2 fairway was exceedingly wet all over, seepage coming down from the hillside to lower levels, where there was practically no grass. Now we have a good fairway and plenty of grass.

I filled up several open ditches which were about one ft. wide and one ft. deep, supposed to be used for drainage, but had not been successful. All golfers know that an open ditch on or along the side of a fairway is bad.

It is impossible to estimate the value of this work in dollars and cents, but there is always a smile on the members' faces when they play over these dry fairways which once were small ponds until late in the spring.

Dry Spell Kept Glen Oaks Greens Force Busy

By ELMER F. AFFELDT

Greenkeeper, Glen Oaks, G. & C. C., Great Neck, L. I.

THE year just past was none too good to us located on Long Island. It opened with a cold, wet spring, and ran into a very dry summer of long duration when the fairways looked as though they would never show a vestige of green again without plowing them up. With the fall rains even though they did come late, brought fairways back beyond expectation.

Those fairways, as well as spots on others, that did not respond as well as they should, were top-dressed with a compost of soil-sand-poultry manure, which was applied rather heavily and then were seeded. The fairways then were dragged with a piece of chain-link fencing 8 by 10 ft. which was hooked behind a light tractor. This left them pretty smooth with the cuppy spots



They get neat, quick results in sodding greens at Glen Oaks.

well filled in. The fairways then were rolled with a one-ton roller.

Work that was started early has shown good results so far and we hope the fairways will come around in good shape in the spring. Some of that done later has shown the results of the fertilization in the color of the grass, being very much greener at this time (Jan. 17). The seed, however, did not germinate at all, so that work, too, should come along well in the spring.

One of the accompanying pictures shows one of our home-made fairway watering units covering a surface 90 by 50 feet or more, depending on grades. Five of these units were kept going 16 hours a day during the drought. One new green was constructed and on the fourth week was ready for play, sod for same having been grown in the nursery for that purpose. Another picture herewith shows method we use in laying sod.

We are now busy overhauling the cutting equipment. We never send anything out

to be serviced as by doing it at home we can keep at least some of our best men together to form the nucleus of a new crew in the spring. It is a costly practice to dispose of men that have been giving good service over a number of years and replace them every spring with green men at a time when called upon to do a great amount of work quickly.

Our method of handling mowers is as follows: first grind the reels, then hone them in with emery and oil, take them completely apart, then place the parts in a tank of very hot water (as near the boiling point as possible) to which has been added one pound of Oakite to every 10 gallons of water. This solution will remove every bit of grease and paint. We then paint the parts, using aluminum enamel for the reel and side frames and a green enamel for the tie rods and wheels. Fairway units are painted solid color in a battleship grey. When dry, mowers are assembled and adjusted. By this method we never have any trouble during the cutting



This makeshift fairway watering outfit at Glen Oaks is one of the drought desperation measures that the on-rush of fairway watering installations will eliminate.

season. Machines purchased five years ago are still in good shape and giving perfect service. Of course it is understood that worn parts are replaced as we go along with our operation.

After the mowers are done we service as much of the larger equipment as we have time with the help allowed us, working on trucks, tractors, benches, tee-stands, flag-poles, etc. In this way we keep the cost of replacements at a minimum.

Late Evening Scouting Spots Brown Patch

By F. J. ROTH
Greenkeeper, Plainfield (N. J.) C. C.

I CONSIDER the best work I did last season was the control of large brown patch. I have been able to do this by consistent close observation and have reached the point where I can see it coming almost the day before it actually forms distinct rings. That is the time I have gotten after it this year and won out with very good success. I have always on hand one 50-gal. barrel and a dozen 12-qt. sprinkling cans which we take from green to green in a Ford with a pick-up body.

I start my men on the greens affected regardless of other work to be done. Of course this means being on the job early and late when the weather conditions are right for the fungus to develop. We look over the greens morning and evenings. By evening I don't mean 4:30 but 7 or 8 o'clock in the evening so that we can get the jump on brown-patch early next morning if necessary. A greenkeeper's job is not a union job so our hours mean just as long, as late and as early as the work demands.

Hoosier Greenkeepers Double Membership First Year

AT the end of the first year of the Indiana Greenkeepers association the organization had doubled its charter roster, with prospects bright for a further increase in 1930. The boys were able to point out a very definite achievement in raising the standard of Indiana course maintenance by lively exchange of information.

Victor George, the husky and able greenkeeper of the Country club of Lafayette, was again elected president of the organization. Other officials elected: Ed Updegraff, Indianapolis C. C., first vice-

president; Albert Esterline, Delaware C. C., Muncie, second vice-president; George Hawkins, Avalon C. C., Indianapolis, treasurer; Carl Bretzlaff, Meridian Hills C. C., Indianapolis, secretary. Bretzlaff had returned from a trip to southern California just prior to the Hoosier annual meeting, and told of his observation of California maintenance methods. The next meeting of the Indiana association will be held during the Louisville national greenkeepers' meeting. A joint session then will be held with Kentucky greenkeepers, who will be invited to join the Indiana association.

Midwest Greenkeepers Elect Bezek New President

MATT BEZEK of the Beverly C. C. was elected president of the Midwest Greenkeepers' Association at that body's annual meeting held Jan. 13 at Chicago. Peter Stewart, Lake Shore C. C., was elected first vice president; John MacGregor, Chicago Golf, second vice president; Fred Kruger, Olympia Fields C. C., treasurer, and A. L. Brandon, St. Charles C. C., secretary.

The organization has sent a letter to every green-chairman in Illinois, enclosing a copy of the program for the Louisville convention and asking that the green-chairman arrange for his greenkeeper's attendance at the national meeting as a proper item in the annual course upkeep cost. All members of the Midwest association also were written soliciting their attendance at the convention.

Sorry Boys, Somebody Looked Up on the Shot

IN the L. A. Young January GOLFDOM advertisement there was one of those boners that make the printers and publishers reflect on each other's genealogy. Al Collins was the pro who favorably mentioned the "timely suggestions of your representative, G. F. Goyette," but a twist of the type put the paragraph over Ed White's signature.

When you clean out that waterhole of yours, do you save the muck, leaves, etc., which you drag out, and compost it? Mixed with lime, manure, and sand, in different quantities according to the nature of your material, it will produce compost for your course.—N. E. Greenkeepers' Newsletter.