

3 L-O-N-G YEARS

... but greenkeepers continue to fight drought successfully, as told here in nation wide survey.

UP to the fourth week in July, despite adverse weather conditions that literally put the forced cultivation of first-class golf courses to the test of fire, greenkeepers have performed a job of maintaining playing standards that should arouse the admiration of the golfing public. Although the greenkeepers' work to date this season generally has been of such success as to identify them as miracle men, even the best of them are keeping their fingers crossed because the tough part is still to come.

However, a nation-wide survey of representative territories recently made by GOLFDOM and the judgment of the nation's foremost authority on turf culture, Dr. John Monteith, Jr., of the USGA Green Section, give license for the verdict on the greenkeepers' current display of ability.

Tournament conditions this year have given an unusually good picture of regular maintenance practice. At Baltusrol, the club officials, Major Jones, general manager, and Charles Chase, greenkeeper, lived up to the early avowed intention of having the course for the National Open just as it would be for member play. Kicks from the star contestants were at a minimum and a volume of kind words were said about the course being a fine test of real golf as it is played. At the Davenport (Ia.) CC during the Western Open, greens were in magnificent shape according to the players. The splendid putting done during the tournament attested to the greens condition. Tees, too often in just

fair shape even at many good clubs, were smooth and of the right length and consistency. Fairways were burned except in the valleys, for Davenport has one of those difficult hill-and-valley problems to handle before it can install fairway watering.

At Happy Hollow, Omaha, where the Western Amateur was held during weather conditions that would fry a hunk of pig iron, players and Western Golf Association officials were loud in their praise of the course. Oscar Johnson, Happy Hollow greenkeeper, relates that the excellent shape of the course was no accident. Johnson had the usual amount of hard work and worry prior to putting on a successful tournament. Says he, "The summer around here has been the driest I have ever seen. Our water bill has been pretty high. Notwithstanding, I'm certain my greens are in the best condition they've ever been. I've been watching against brown-patch and sod webworm and haven't had any trouble worth mentioning from these sources.

"I attribute not a small part of the way our greens have developed and held up to our practice of spiking a great deal

of peat moss into them. Our greens have a tendency to harden, due to hot weather and persistent hot winds. Conditioning with peat moss helps these greens to hold the right amount of water, and what is almost equal in making the greenkeeper's mind at peace, the greens in which peat moss has been introduced hold the approach shots of players."

Better Conditions Mean More Members

Around Detroit, where the golf and industrial comeback has been great, Herb Shave, greenkeeper at Oakland Hills where the 1937 National Open will be played, highlights the conditions he and other superintendents are experiencing. "Maintenance standards are higher this year," says Shave, "because clubs are realizing that to fill memberships the courses must be kept in best possible condition. Wages have increased and more men are being employed. There has been considerable new equipment bought this year, replacing worn-out equipment. This, of course, has had its effect in improving course condition without correspondingly increasing the expense of maintenance.

"Fairway watering equipment, hoseless and hose, has been having a good selling season. This year's fertilizer sales will be far above average. All these things point to a marked comeback.

"Early season weather conditions were none too good. It was wet. Nights were cold. Greens and fairways were so tough it was like trying to cut wire. Greens did not get much color until June. From the start of June until July 4th we had great weather for growing grass in the Detroit territory, but after July 4th we were right in the heart of tropical desert weather.

"The way the greenkeepers in this district have held their greens during the hot weather has been remarkable. This has required judicious watering and care in cutting, and all the advantages of correct construction and luck that one needs in this business, but doesn't always get. We have had lots of clover in fairways this year, but I guess this condition is widespread. The heavy snow last winter seems to be one reason for the clover crop we have this summer.

"Brown-patch has not been troublesome. Weather conditions have helped, and every one of us with budgets that will permit are playing the safe game of 'an ounce of prevention is worth a pound of cure.'

"Budgets this year generally are higher. Imperative need of equipment replacement, fertilizer, higher wages and the knowledge that a real thrifty budget makes provision for possible emergencies, all have figured in the budget increases."

Somewhere East of Suez In Torrid St. Louis District

It is somewhere east of Suez where the best is like the worst, according to Kipling's dope, and the greenkeepers put St. Louis in that location regardless of what the geographies show.

Robert Foulis, spokesman for St. Louis district greenkeepers, considers that the job generally done by the men in that territory this year represents one of the finest achievements of course maintenance. In addition to having a bad drought year to date, St. Louis has suffered from terrific heat, temperatures of above 100 being registered for 15 consecutive days. Since the middle of April in that territory, they have been watering greens, approaches, and tees. There have been very little fungus or insect troubles up to mid-July. Greens, for the most part, are in excellent condition.

Fairways, reports Foulis, are badly burned and will require heavy seeding and fertilizing this fall. He remarks that fairway watering is a problem that the St. Louis sector will have to meet. He has 13 fairways at the St. Louis CC irrigated. One of these fairways has had watering for five years. All of these fairways (which are under Foulis' supervision) have come through the hot weather and drought in good condition. Budgets are normal.

Is Greenkeeping a Science or an Art?

Howard Farrant, greenkeeper at The Country Club, Brookline, Mass., in giving a summary of outstanding conditions in New England, touches on a point that for the first time, so far as we can recall, is located as a source of greenkeepers' troubles. The point is that working the men under forced draft, as many greenkeepers have been compelled to do on account of depression budgets, has shown up in the work done. This matter has been mentioned vaguely in the remarks of a number of greenkeepers interviewed by GOLFDOM and is worth a story all by itself. Just how much of greenkeeping is a science and how much of it an art, probably has more bearing on the labor situation than most of us in the course maintenance field realized. Farrant's com-

ments on New England conditions:

"Maintenance conditions are about back to normal, although working crews are practically cut in half. Normal or better maintenance is due to mechanical labor; but I feel the working interest is not as keen, due to jumping men around and faster operation.

"Dry weather in the early part of the season encouraged weed growth more than normal; present weather is normal for this time of year in this section. Golf courses are in good condition but still on the dry side; very little brown-patch weather to date.

"Last year's play was far ahead of the previous three years. This year is the equal and possibly better than last. Compared with last year, I would say budgets are a little higher, but roughly one-third below normal good times. Labor costs are below normal, naturally due to higher machine maintenance, which in turn is due to more mechanical operations.

"Under prevailing conditions today, to have a course in good condition with an average budget, course construction must be given a lot of thought, due to all the new machinery and speed. It will mean reconstruction in a lot of cases to save money and to meet machine advance."

Jersey Courses Haven't Been Hit

John Anderson, president of the National Association of Greenkeepers and greenkeeper at the Essex County CC, makes an authoritative report on Jersey course conditions, bringing out the good news that tree trouble, which was seriously threatening in New Jersey, is on the wane. Says the greenkeepers' No. 1 man:

"Since play commenced in late March or early April in New Jersey, there has been evidence to show that golf clubs are getting back to the good times of 1927.

"There can be no question that the clubs are busier, more tournaments are being scheduled and more people are playing golf. The depression is over, and to prove it, even many of the greenkeepers are getting part of their salary cuts back. You can take it for granted that when that happens, times are better.

"In this section the weather man has been very generous this season, allowing heavy work and play on all golf courses. Although the latter two weeks in May and first week in June were very dry, and unwatered fairways started to burn, rain and plenty of it came June 10th. Then for

two weeks plentiful rains gladdened the hearts of greenkeepers, although we all had to be very much on our toes intercepting brown-patch as a result of heavy rain and humidity. However, almost a minimum of disease was encountered until the beginning of July, when the heat wave came along and some scald was inevitable. Some of the scald will not recover until the cooler fall season, and some will require reseeding.

"New Jersey is one of Allah's favored states, inasmuch as it seems to be exempt from the extreme ravages of floods, tornados, electrical storms, killing droughts and pests. Greenkeepers in New Jersey have their troubles to be sure, but we always just seem to escape disaster. In many parts of the state early this spring, it was thought many fine shade and ornamental trees would be killed. First the tent caterpillar seemed to have reached a peak in its 3-year cycle and stripped elms, oaks, maples, nuts and many others, until they were almost denuded of foliage. Then along came inch or wire worms and just about finished what the caterpillar started.

"Some of my mid-west friends visiting New Jersey for the National Open predicted that many of our fine trees would not recover; however, I am glad to report them fully recovered now.

"Many clubs have had to replace worn-out machines, so that equipment salesmen report good business. Much credit is due the greenkeeper for making old worn machines operate these last 3 years; he has known that it was costing the club extra dollars to make them function, but just could not get enough ready cash to purchase new equipment, and thereby in the end make a saving. Much credit is due the enterprising manufacturers for the step forward in course equipment, but there again the greenkeeper has been the inspiration, and in many cases told the makers what he wants."

Clubs with Pools Do Land-Office Business

M. E. Farnham, superintendent at the Philadelphia CC, observes that the dry season in the Philadelphia sector has shown many striking instances of liberal lime and phosphate use, especially the former. Budgets in that territory have still some way to go before reaching the level required by the exacting standards set in better days in the district.

There is a slow increase in memberships

but a noticeable increase in club business. Swimming pools are drawing family patronage. Lehigh CC did the largest day's business in the club's history on the opening day of its pool. Philadelphia CC opened a new pool July 11 and has been doing record business, even though many of that club's members are at shore resorts to escape the hot weather.

Farnham says:

"The story of 1936, so far, is soon told—dry weather. Since the last week of April things have been getting drier, daily. There have been occasional local showers but nothing of any consequence to unwatered turf. Aside from the lack of moisture, weather conditions have been unusually favorable. Except for one hot week, the temperature has been fine for turf.

"As a result, maintenance problems have been rather simple. Disease has been less troublesome than usual. Chinch bugs have not been troublesome as yet. Cutworm and webworm injury is rather severe at this time.

"The season has not been productive of new or novel maintenance practices as might have been the case in times of turf troubles. Fairway watering is a limited practice in this district, but I would not be surprised if present conditions resulted in some installations."

K. C. Courses

Try Dry-Farming

After three drought years, club officials and greenkeepers in the Kansas City sector are wondering where to turn next, according to Chester Mendenhall, able superintendent at Mission Hills CC. "Up to May 23 this season, we had received only 8 inches of rain," he writes, "and since that date we haven't had a good dew!" Normal precipitation to July 1 is 13 inches more than has actually fallen; hence, fairways are burned to a crisp. Re-seeding operations in the falls of 1934 and 1935 were a waste of time, due to drought conditions the following summers, but this state of affairs has at least taught greenkeepers something about dry farming. Mendenhall explains:

"Most of the clubs instead of cutting their fairways at $\frac{1}{2}$ inch, as before, started out this spring cutting at 1 inch and raised with the coming of hot weather to $1\frac{1}{2}$ to 2 inches. This left fairways with a heavy crop of grass, even though it was dried crisp.

"A heavy fertilizing and seeding pro-

gram is due again this fall. There will no doubt be some fairway watering systems put in this fall and winter on the better courses.

"Greens throughout this section are in the best shape I have ever seen at this time of year, in spite of the fact that temperatures have been consistently above 100 since June first. Due to the dry air condition, there has been very little brown-patch or worm trouble.

Play Is Up But Heat Takes Toll

"Up to July first there has been more golf played in this section than any time since the depression. Of course the extreme heat has driven away most of the players in the last few weeks. The financial condition of clubs is far above what it has been the past few years, so they are inclined to spend a little more money on the courses. I would say that the budget for maintenance on most courses this year will run 20% higher than in the past two years. This, however, will still be 30% lower than what was spent before the depression.

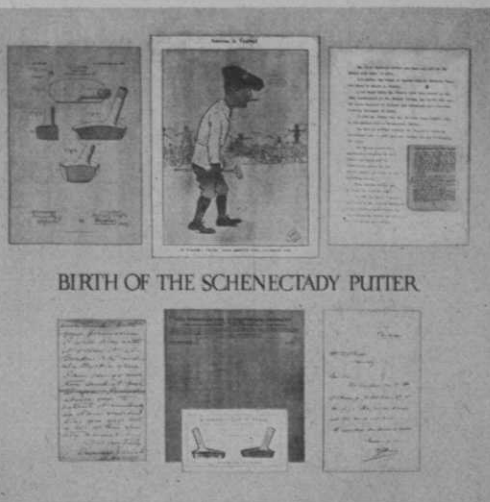
"In spite of lower budgets I believe the course maintenance is far above par prior to the depression. This is due to modern equipment which enables the greenkeeper to better take care of his major problems and give more time to smaller items which, after all, are often the most important items in golf course maintenance."

Jumping now to the northward, here is what Leo Feser, former editor of the "Greenkeepers' Reporter" and superintendent at Woodhill CC, Wazata, Minn., has to say about current conditions in the Minnesota area:

"The total damage to golf clubs caused by the drought and heat of the past month will never be definitely determined. So far as the Northwest is concerned, the damage to clubs caused by the drought is greater from the standpoint of economics than from direct injury to turf. The great agricultural region had the most promising spring of many years. Farmers purchased sorely-needed equipment, expecting to pay the bills from what seemed to be certain crops. With farmers in the market, all lines of business improved. Club members who have had very depressing business worries for the past six years began to look for some relaxation, and the golf fan who plays the public courses began to think in terms of larger pay checks and a few more quarters to pay the fees.



BIRTH OF THE STEEL SHAFT GOLF CLUB



BIRTH OF THE SCHENECTADY PUTTER

Seldom does a golf club have the opportunity to exhibit historical data of the character of that displayed in the clubhouse of the Mohawk GC at Schenectady, N. Y. Patent papers, correspondence, illustrations and advertisements of the Schenectady putter and the steel shaft, both of which were invented by the late Arthur F. Knight, Mohawk member, are shown in two frames that invariably draw interest of visitors. The exhibit was prepared by S. H. Blake, Mohawk president, and T. A. McTerney, secretary.

"The drought gradually forced people to think more about the price of potatoes next winter. It also increased the cost of golf maintenance and detracted from the quality of the courses. Furthermore, the golf bug had to bite very deeply to force the duffer out when the mercury insisted on breaking 100 plus day after day. These days of terrific heat hit the public course incomes a staggering blow. Only the record spring business gains over the previous year enabled the public owners to grin and bear it.

"Where do we go from here? Trouble the species homo enough and one of two things will happen: he will continue to be troubled and eventually go nuts, or he will make an effort to ditch his troubles and preserve a healthy state of body and mind. To keep fit means that we have to break away from our trouble and find recreation. After all, every day of drought brings us one day nearer to ample rainfall. All the stewing and ranting we can do doesn't alter the fact.

"Clubs having swimming pools were frantic with business during the extreme heat. These institutions gained on sales checks what they lost in green fees.

"The moment the mercury settled a bit, the boys and girls yielded to the niblick urge and came back on the light brown fairway again, tickled pink that their driving improved so much during the layoff. The fact that the ball bounds along the

fairways like it would on a brick pavement detracts not a whit. The 150-yard driver gets a big kick out of finding his ball 250 yds. up the fairway. The ability to add 100 yds. to your drive after a two-week layoff is something to treasure.

"Where fairways were amply watered the golfer is so pleased with the delightful sensation of walking on cool, thick, green and luscious grass, that he isn't worrying about the fact that his driving ability has not improved during the layoff. After all, the golfers are getting a bit tired of sweltering in the shade with a tall glass that clinks when you shake it and is wet to the touch, and they are rarin' to exercise some of those softened muscles.

"The greenkeepers have had to work and worry as usual. One outstanding difference between the present drought and that little old dry spell of 1934 is the humidity. Back in 1934 the air was so dry that it absorbed plant water evaporation instantly. During the recent heat wave the humidity held down evaporation and ideal conditions for scald and fungus developed. While most of the courses in this region came through in good condition, the credit must go to the greenkeepers and perspiring workmen."

Chicago Will Have Increased Water Bills

John MacGregor, ex-president of the NAGA and in charge of the Chicago GC layout, furnishes GOLFDOM with observa-

tions on golf conditions around Chicago. John admits that the duties of keeping his layout in A1 condition have prevented him from visiting many other courses this season, but feels sure the conditions he's met at his course are representative of the Chicago area.

"I have been watering fairways daily since June 5," he says, "which is way and above the usual requirement, so water costs are going to be high this year. In addition, so much watering means considerable washing away of potash and nitrogen from the soil, and these elements will have to be replaced; all watered courses will, of necessity, have an increased fertilization program to follow this fall.

"On the courses without fairway watering, the turf is so dry that wise clubs are warning members to be careful where they toss matches lest they start fires.

"The lack of rain has been accompanied by unusually high humidity, so brown-patch must be constantly guarded against. Grubs have not showed to date, but cut-worms are causing me some trouble.

"In spite of the dry conditions, I am having a lot of success with an experiment I began this spring. Early this year, before the grass started to grow, and again two months later, I applied 400 lbs. per acre of 10-8-6 fertilizer to the fairway area lying between 185 and 235 yds. out from each tee. I put on the material when the grass was dry and, particularly in the second application, was careful to water the application in well.

"As a result the grass is so heavy this season in these areas that dandelions and other weeds have been smothered. It seems to me to be the answer to the fairway weed problem. This fall I intend to apply another 400 lb. dose to the fairways and again next spring. Whether the formula will be the same depends of course on the soil analyses I always make a point of securing beforehand."

Water and power bills are going to be well up in the Southern California sector, according to word from Robert S. Greenfield, superintendent at Wilshire CC, Los Angeles. Clubs in that area are forced to pay \$600 to \$800 for July water needs and all of them are hoping to get a cheaper supply once the Boulder Dam aqueduct is completed. So large a water bill is hard on any club and tends to make golf unduly expensive. This year there have been extra demands on water to offset the weather.

"The average course out here," writes Greenfield, "is in excellent shape, considering the funds available. There hasn't been any increase in course budgets that amounts to much, though quite a few clubs have purchased new course equipment.

"There has been an increase in play. It was noticeable last year and invitational tournaments so far this season have been well patronized."

Greenfield points out one interesting trend. Real estate values are going up around Los Angeles. Taxes, he says, are sure to rise correspondingly, with the result that some of the less patronized public courses may have to close down. Players from these courses will shift to surviving layouts where increased green-fee volume will permit better maintenance budgets. "It may all be for the better in the end," comments Greenfield.

Ball Gathering—Charles Victor, ingenious greenkeeper at the East Potomac course in Washington, engineered the device illustrated for gathering balls at the course's large driving range.

The device is dragged around the range by an old automobile that has its windows protected by heavy wire netting but which shows on its steel sides numerous signs of heavy bombardment.

The machine looks like a snowplow in reverse. Sideboards, supported by wheels,



This machine saves time and, perhaps, a cracked skull or two.

are at a height that nicely clears the ground. Balls are rolled along by these sideboards until the balls reach the opening at the rear. At the rear are a couple of revolving brushes, one of which is shown sticking up between the two rear wheels. These brushes are geared directly to these large rear wheels and as balls are rolled back into the opening between the sideboards a brush flips the balls up an inclined slope into the boxlike cage in the rear.