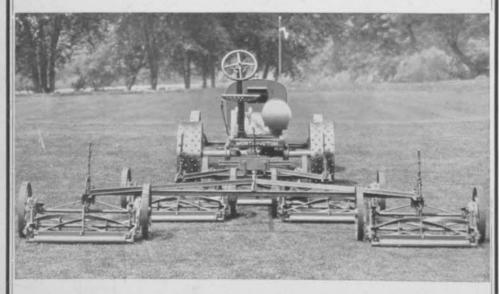
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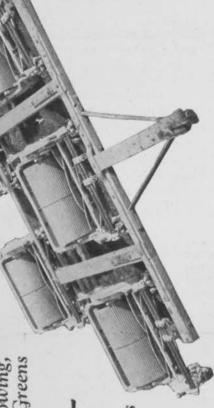
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THE BUSINESS JOURNAL OF GOLF

JUNE, 1927

How Westmoor Opened With a Waiting List

Iness men of Milwaukee who were not content with public park and fee course golf got together and started the Westmoor Country Club. In October, 1926, the club's 300 charter memberships were sold out and a waiting list of 600 was recorded in the club's house organ, the Westmoor Divot, Cn May 28 the club fomally opened a first class 18-hole course with all fairways in remarkable shape, 18 greens as good as any few greens you ever saw, and a beautiful, splendidly equipped clubhouse, representing an investment of approximately \$45,000, operating.

Westmoor's tale is rich with helpful details for other clubs in the formative stage for there was nothing done at this establishment that wasn't strictly in keeping with first class metropolitan district club operations with the exception of omission of fairway trapping, which is to be put in later.

Two factors featured in Westmoor's notably speedy arrival. One was a financial plan of vision, thoroughness and caution, and the other was the "everlasting teamwork of every bloomin' soul."

Westmoor's organization plan called for two divisions; one, the land company, stock in which must be held by any member of the second division, the country club. Stock for the land company was placed on the market at \$250 and even prior to the opening of the course changed hands at \$450, of which \$50 was a country club membership transfer fee.

There were three plans of paying for the stock and memberships in Westmoor; plan A-\$250 cash, plan B-\$50 cash and \$15 a month until \$260 had been paid, and plan C-\$25 cash and \$10 a month until \$275 had been paid. The differential was approximately 8 per cent. Plans B and C were convertible at any time before their paying out, upon payment of interest charges. The club had 50 of the plan A people, 137 of plan B, and 113, plan C. The plan B and C bills were sent out on the first of the month and if they were not paid by the 15th a 50 cent penalty was attached. During the entire time there were not more than a dozen delinquents.

This financing gave the club a continual monthly income which was exceedingly helpful in paying construction costs and it also proved to be a big factor in getting the membership sold quickly so the club was permitted to proceed with its other work without having to spend the usual amount of time and effort in securing memberships.

Booster meetings and the publication of an exceedingly newsy and practical house-organ kept interest at fever-heat in the organization. Such events as stone picking "bees" when the members and their families assembled to gather stones out of the fairway, impromptu picnics in the picturesque grove on the edge of the club's lake, a bird-house building contest for the sons of members, dedication of the clubhouse, the water-plant and tree planting ceremonies also stirred up the Westmoor

membership and created a bond of lively mutual interest and friendship among the members.

The booster meetings were great places for getting new members. Prospective members had a chance to look over the Westmoor tribe and to hear all the details of the club's development. The first booster meeting was attended by 80 of the club members and 15 new members came into the fold. The day before Thanksgiving, 1926, the membership roster closed and 40



By using the basement of an old barn Westmoor got an equipment shed that is handy, inexpensive and practically concealed from the clubhouse by the side of a hill.

applications for membership were received.

Small and Busy Directorate

There are only five directors at Westmoor and they have met every Monday night since September, 1925. They are workers who have stayed on the job with unabated enthusiasm and giving extreme care to the many details of club construction. The club is headed by W. W. Hiller, a capable young man who is treasurer of the Wisconsin Bell Telephone company, and in Westmoor's astute financing there is evidence of the application of the Bell's careful money policies to the golf club field. As an example of how carefully Westmoor built: there were 17 estimating specifying and superintending committees composed of members who were well acquainted with the work of the committees upon which they served. As a result, Westmoor came into being with greater freedom from construction mishaps and omissions than almost any new club of recent origin that can be called to mind.

The water supply at Westmoor shows how this expert committee plan worked out. Several of the members are associated with the Allis-Chalmers company, makers of pumps. These fellows were on the job winter and summer, planning, checking and supervising construction.

This committee estimated that it would get water at 365 feet. The actual depth of the well is 361.9 feet. A reservoir was built to care for storage and to provide an addition scenic effect. Instead of pumping directly into this lake, the water came out into a fountain made by Arch Schendel, the club's superintendent of grounds. It makes a pretty detail of grounds decoration and shows how Westmoor overlooked no opportunity to make a fine showing for its money.

Get Good Course Quick

Westmoor was fortunate in getting this young fellow Schendel who served his apprenticeship under several masters greenskeeping and stepping out a few years ago "on his own." He is wrapped up in his job and has kept on a long-hour schedule busier than a bird-dog in order that the Westmoor course will be definite evidence of his ability as a course construction and maintenance expert. With 17 of his stolen greens he got fine results, despite the unfavorable weather conditions. One of the greens had the "gypsy curse" on it at the start as torrential downpours fell three times right after he had completed his planting. He finally got this green on its way and at present writing it is in excellent condition.

The tees at Westmoor are small, but sufficient, and are well designed for machine maintenance. On the Westmoor fairways Schendel's mixture of blue grass and red top, 4 to 1, and sowed 180 pounds per acre, came along very well. He attributed the results in a good measure to the use of fertilizer which consisted of 1500 pounds of Milorganite and 200 pounds of acid phosphate per acre. He fertilized a week or 10 days ahead of seeding. Rough was sowed to a mixture of equal parts of meadow fescue, perennial rye, blue grass and red top, 100 pounds per acre.

Work of the drainage committee also showed to good advantage in getting the course in finished condition early. There were only three small spots revealed by the spring rains as having passed the eagle eyes of that vigilant body.

Insure with Care

Westmoor exerted every effort to protect the organization with insurance, even going to the extent of asking Lloyds of London relative to insuring catch of seed, but found Lloyd wouldn't take this risk.

The insurance Westmoor did get included fire, tornado, public liability and workmen's compensation. They also insured the seed against fire in the warehouse. The club built in a completely fireproof manner, and has fire extinguishers placed in the right places. This matter of tire protection and insurance has been something of a problem for Westmoor as the club is located miles from the nearest fire facilities. Deposit guaranteeing payment for any necessary trips of fire fighting equipment have been made with three fire departments in the nearest suburban towns, and men from these departments have inspected the clubhouse during course of construction, making some valuable recommendations. Insurance inspectors checked the plans for the clubhouse and they also figured in making the nearest possible complete elimination of fire risk at Westmoor.

Fight Texas Sun With 232 Water Outlets

By Francis Scheider,
Professional, Brook Hollow Golf Club,
Dallas, Texas.

THE average yearly rainfall at Dallas, Texas, for the period from May 1st until November 1st is 18.21 inches, therefore, one readily can see just how much irrigation our Bermuda grass requires to keep it verdant during the long hot and dry summer months.

We start watering in the early spring about March 20th, just when the tender Bermuda awakes from its winter sleep, and then confine our watering to only the greens and tees. About one month later we start to irrigate the fairways, tees, and greens regularly and water continually until the first frost comes which usually occurs around November 15th.

I have had the pleasure of viewing a great many watering systems at various golf clubs but have yet to see one quite as complete as the one we have here at Brook Hollow; our water supply is obtained from the Trinity river which flows along the very edge of our property.

On the banks of the river, we constructed a concrete well and run water into it through a 24 inch cement casing, the casing being screened at both ends to keep out trash, etc. The well is five by seven by 18 feet deep, or just about the depth of the river at that particular point. Near the well, about 25 feet away we built our waterproof concrete pumping station. It stands above high water mark about 18 feet and extends into the ground about 18 feet more. The pump is bolted to the con-

crete floor of this station. The pumping outfit consists of an electrically driven direct drive centrifugal pump capable of pumping eight hundred gallons of water a minute. The tank which is 160 feet high and has a capacity of 100,000 gallons, is situated about a quarter of a mile from the pump house. An eight-inch main is its



Fairway sprinklers and pressure from its watertower keep Brook Hollow fairways verdant.

feed supply. In the summer months when we are watering continually we pump almost direct to the sprinklers the tank absorbing only the surplus. Without a sprinkler going it takes about two hours to fill the tank but on the other hand with 50 sprinklers running it only absorbs enough water to run over in from five to six hours. The motor is equipped with a cut-off and acts automatically when the tank is filled.

We have a total of 232 one inch outlets at Brook Hollow, one fairway (number five), having 24 alone. With but few exceptions we have two outlets on every tee and green as some of our tees run 50 yards long. We use Buckner fairway sprinklers running over fifty at one time. Our greens and tees are watered on alternate nights while the fairways are watered continually day and night. To take care of all this watering we use over 6500 feet of We start watering the one inch hose. greens at eight o'clock in the evening and water until five in the morning when the hose is coiled and left to be moved to the adjoining tee the next night.

One man takes care of the eighteen greens making a round about every hour. One man also takes care of the fairways at night, for we keep about 34 sprinklers running on them also.

In the morning when the day man comes on he sees that all the dry spots are thoroughly soaked before the hose is transferred to the other fairways. We water from three to four fairways at a time, going over some of them twice a week. Due to the fact that our soil is sandy loam it requires a great amount of artificial irrigation, therefore, it is necessary for us to use over 600,000 gallons of water every twenty-four hours. Thank Heaven we don't have to purchase it by the gallon.

I am well aware that when to apply water has been a controversial subject among greenskeepers and others interested in the proper maintenance of golf courses. Here in Texas where the weather gets very hot in the summer one cannot confine his efforts to night watering alone—we just have to water continually.

Check Up on Your Records of Course

By C. A. TREGILLUS

In GOLF greenkeeping, as in other lines of human endeavor, we are living in an age of eager progress: something new and better is recorded in each succeeding issue of our journals. With every new purchase of mechanical equipment, with every change in method, there is an unconscious speculation on how long before it will be superseded by something a little more up-to-date, a little more efficient and a little more scientific. We are breathless with expectancy that some improvement will steal a march and catch us unawares.

The urge for efficiency-perfection-has brought untold benefits to the modern golfer, and newcomers to the game little realize the fullness of their inheritance. To assist with the formation of new courses and metamorphosis of old ones, there are unlimited funds of information available from many sources, both commercial and academic; information based on practical experience and scientific investigation; so that new ventures may be launched on the wave-crest of advanced ideas. But, no matter how crammed with information, equipped with the last word in mechanical appliance, or provided with the most serviceable seeds or turf, there is still much to be gained before any club can be considered properly established in its greenkeeping methods. The missing quantity is individual experience, which must be gathered on the spot. A greenkeeper, though well informed and expert in his vocation, swallows a gilded pill when he takes charge of a new course. No two individual courses are identically alike. Those side by side have much in common, but retain their singularities, both as regards layout and turf, in spite of all attempts at standardization in methods. He must build

up a history of experience and observation to reinforce his technical skill before he feels competent to understand and manage the peculiarities of his new charge.

All improvement and all progress is based upon previous experience; the changes that are made this year depend upon what happened last season and the season before; the improvements in machines put on the market this year result from the behavior of earlier models and so on.

How Are Our Records

The whole point of the story is this: are we logging our course along the river of progress and are we holding on to the experience of today to use it tomorrow? The keeping of full records of all that happens upon the course cannot be too strongly urged. The bald tects, that so much was spent upon labor, seed, fertilizer, chemicals etc., convey only a bookkeeping idea of the general trend of maintenance that must be checked against an actual survey of the links. The real facts, the facts that properly tell the story, are locked up in the heads of those who had the actual spending of the money provided for the purpose. Many interesting vital items remain memories when they should have been recorded and filed away for future reference.

The dearth of full, complete records is appalling. Take, for one example, the water system. In spite of carefully prepared plans rarely does the finished system correspond to the last detail. Topography, and physical object may change slightly the location of the pipe lines; drips are put in where it is deemed advisable when laying, and unions placed for easy dismantling. All this data, together

with depth of pipe is not shown on the original and for lack of revision, fairways are torn up in search of pipes ruined by frost; all because the information of such details was not properly filed. Have you a really accurate plan of the drainage systems operating on the course; have you detailed information on the construction of each green; are keeping a diary of the happenings on every green, fairway and tee, and the rough; do you score the greens at given periods to compare their condition throughout the season; do you check the number of players on the course with its condition?

These facts and many more, are worth while items to put on record, where they can be later analyzed to the profit of the club and as a guide to future operations. Commercial clubs especially, cannot have too much information of this sort, because it all has such a direct bearing upon net revenue.

A Valuable History

And in addition, records of this nature provide a chain of continuity, a valuable history, to be passed to succeeding committees and officials. They give the newly appointed committee something to work from and in greater degree it assists the new superintendent to grasp quickly the essential facts regarding his new work.

To keep a log of this is not a heavy imposition. The greenkeeper should be required to hand in to the office each day a summary of the work done, materials used and itemized, repairs, etc. together with simple observations on weather, general conditions and unusual happenings. This may be typed out with further information gathered by the manager, as, number of players who teed off and criticisms on course conditions, etc. Three copies may be made; one for the office, one for the green chairman, and one returned to the greenkeeper. Postings from this day sheet may be made to the individual pages for each tee, fairway and green. The cost of this in comparison with the total outlay for the season would be negligible and the information gleaned from a proper discernment of the facts tabulated, would vield handsome dividends,

How to Wage Battle Against Mosquitoes

OSQUITOES are a nuisance about any country club. They not only annoy the members in the evening, but frequently are just as annoying during the daytime, particularly on the moist, windless days of late summer.

Many a member has refrained from playing his usual number of rounds because of the discomfort he knows he will suffer from the mosquitoes, and it is not uncommon, during the height of the mosquito season, for a course to be almost deserted for many days, with a consequent loss of revenue to the club.

In fact, the prevalence or absence of mosquitoes is frequently the deciding factor between an operating profit and an operating loss, and therefore a subject which should be of keen interest to country club officials responsible for running expenses.

Are mosquitoes a necessary evil? Positively not, unless your club is surrounded by swamps and, even then, the case is not hopeless.

On the contrary, the pest can be elim-

inated, or at least greatly abated, by any club willing to follow a few simple preventive measures, for the mosquitoes of a given area are for the most part hatched from eggs laid in the immediate vicinity. In its lifetime, the mosquito rarely travels far from its birthplace, for it is a notably poor flyer. From the viewpoint of the country club, therefore, the problem of eliminating the mosquito amounts to no more than adopting the necessary precautions on the club grounds.

Mosquito's History

It is well to consider the salient details of the mosquito's life history. The eggs are deposited in any available body of stagnant water. A day or so later they hatch into larvae or "wigglers," as popularly called. These wigglers feed on the bottom but must come to the surface periodically to breathe. As the days pass there are some unimportant changes in the wigglers' appearance but within ten days, generally less, the adult mosquito forms. Thus it can be seen that during the course of the

summer there will be many generations of mosquitoes in a given area, and such preventive measures as are adopted must be persisted in if the mosquito population is to be held at a minimum.

The most simple and effective method of control is to abolish or render uninhabitable the haunts of the wiggler. In golf and country clubs, the most fertile source is very liable to be the water hazards, particularly if these hazards take the form of still ponds. Wigglers cannot live in running streams, but if there is any still water on your course it is the natural birth place of millions of mosquitoes, and the proper mosquito-proofing measures should obviously be directed at such ponds first.

The old standard treatment was to oil the surface with kerosene, thus forming an oil film which suffocated the wigglers when they came up to breathe. But there were objections to this treatment. The odor of the kerosene was unpleasant; the film collected dust which later soiled the grasses at the edges of the pond; and, most important of all, a golf ball hit into the pond could not easily be recovered.

The better method of treating water hazards is to deepen the edges of the pond, remove the vegetation that grows along its margins, and then stock the pond with either goldfish, silver fish or "top minnows." These fish will soon rid the pond of wigglers. It is necessary to deepen the edges and to remove the vegetation so that the fish can reach all parts of the pond. Otherwise, if the edges taper gradually off, the wigglers can develop into adults in water too shallow for the fish to reach them.

It should be noted that kerosene and fish cannot both be used, as the oil-film will suffocate the fish just as it does the wigglers.

A Wiggler Preventive

As a supplementary preventive to make sure that the pond is kept free of wigglers, it is recommended that a mixture of one per cent paris green and 99 per cent road dust or fine sand be prepared and a few handfuls of this mixture be sprinkled in the pond at frequent intervals. This mixture will kill thousands of wigglers but is too weak to hurt the fish or vegetation.

After the water hazards have been mosquito-proofed attention should be turned to ornamental pools about the grounds, fountains and the like, and these pools should be stocked with goldfish.

Located near each green on most golf courses are sunken boxes where the sprinkling hose is stored. The bottom may collect stagnant water. Examine your hose boxes, and if water is found to remain in them, make such changes as are necessary to insure prompt drainage.

Next examine all other necessary accumulations of water about the club house, including cess-pools, septic tanks, fire buckets, water tanks, and the like, all of which, if exposed to the air and unscreened, will encourage the breeding of mosquitoes.

If the cement is cracked even slightly around the rim of the cess-pool cover or septic tank, have the break repaired. It is amazing how slight a crack will furnish the necessary passage way to allow the female mosquito to enter and deposit eggs in these ideal locations, where breeding can go on unchecked. Make sure, when examining these spots, that the covers themselves fit tight and firm.

The water tanks necessary for drinking water, or shower baths, should be screened, whether these tanks are indoors or out. Mosquitoes get inside of buildings and they breed and lay eggs just as readily indoors as out.

If there are fire buckets about the club house and the other buildings on the grounds, instruct the employee whose duty it is to keep these buckets filled to empty the water from them and refill at least once a week during the mosquito season. Thus the water will be changed before sufficient time has elapsed to allow the mosquito wiggler to mature.

Examine the roof drains of every building on the grounds and clean out any pipes stopped up by leaves or debris. Frequently such places hold water for many days after rain and are, therefore, ideal breeding places. This is particularly true where trees overhang the roofs or where ornamental vines have grown up over the porches.

Attention should next be directed to the club dumping ground because here old bottles, tin cans, dishes, cooking utensils and boxes accumulate and with each rain collect water. Even a very small amount of water such as these articles will hold is sufficient to breed many thousands of mosquitoes. Accordingly, the club employee who hauls waste material to the dump should be instructed to examine it periodically and turn, mouth down, all receptacles

(Continued on page 33.)