"LEFT-HAND CHAMPIONSHIP.
"SENIOR EVENT—Men 65 years and up.
"MEN'S club championship.
"LADIES' club championship.
"We had a men's championship flight of 32; 16 in Consolation and six flights of 16 players each.
"CADDY-LADY Event.
"LADIES' DAY—Each Tuesday with luncheon at 12:30; varied tournaments and contests each week.

"HOLE-IN-ONE event—Only players who have made a "one" eligible.

"19th HOLE—119 yards—built to make long walk from No. 18 to clubhouse a pleasure. "Beer Hole"—John Walter of the Detroit News won a prize on this hole in 1942 the day Orlick and Al Watrous defeated By Nelson and Jim Demaret.

"CADDIE TOURNAMENTS—Five this year.

"VETERANS EVENT—World War I Vets vs. World War II Vets match play with handicap—Minimum of 6 holes required. Three War II Vets paired with one War I Vet. (Three matches per foursome).

"LOW GROSS & LOW NET events.

"KICKERS HANDICAP on holidays, stag day and special days.

"MEN'S AND LADIES' ORLICK TROPHY—Men with handicap of 20 and over —Ladies regular handicap. Match play.

"PRESIDENT'S STAG DAY — Biggest event on our program—non-members invited.

"GUEST DAY—One of two days each year—county non-members invited. (No non-member resident of Monroe County may play other than above two days).

"We phone in or deliver written copies on all golf activities to The Monroe Evening News, where it is handled in great fashion by "Hap" Funk, sports editor. Hap knows how to word his golf articles to suit all golfers.

"I referee both the Ladies' and Men's finals in the championship.

"Prior to match play in the club championship I arrange to have the 32 qualifiers meet, so we can go over the rules and make any special rules for the event.

"We have had our share of outside events:

"1941—Exhibition by Miss Helen Detweiler.

"1942—Byron Nelson and Jimmy Demaret were defeated 5 and 3 by Al Watrous and Warren Orlick.

"1942—Pro-Amateur.

"1946—Michigan State Assistant Pro-Championship—36 holes medal.

"1947—Toledo Ladies' District Event.

"In our caddy training and recreation we use the standard PGA caddy training

(Continued on page 90)

A busy schedule does not prevent professional Warren Orlick (L) from taking time out for a few practice swings with his irons although the occasions are too few according to Orlick. Shown below is group that participated in the Lady-Junior Day tourney which Orlick schedules as regular annual event. Special lesson rates to Juniors coupled with scheduled tournament events has helped Orlick build and maintain a constant program that will be of direct benefit to him and the club when the youngsters grow up.
The 7 that add up to No. 1

A superb new line of bags comprising seven de luxe models (four all-leather; three combination fabric and leather)—retailing from $25.00 to $95.00. Made in the Wilson golf bag factory—known over three decades for quality golf bags. *Country Club* bags are constructed of finest materials and with pre-eminently expert workmanship. Sell these bags with the firm conviction that each represents the utmost dollar value. For your top bag line, carry all seven. It will simplify your inventory problem... and increase your turnover.

Wilson Country Club

GOLF BAGS FOR 1949
AMERICA'S No. 1 BAG LINE

The trade mark *Country Club* means unusual design, extra fine quality, and long lasting service—the last word in golf bags.

Illustrated: Model D0203, $80.00

WILSON SPORTING GOODS CO.
Chicago, New York and other leading cities
(A Wilson & Co., Inc. subsidiary)
Labor continues to be a major golf course problem, even more serious than during the war. Most clubs were worse off at the start of this season than ever before. They limped along until June and relied upon high school and college students during the summer. The boys were satisfactory for mowing, but not for painstaking tasks. Now that they have returned to school, the complaint about being shorthanded is prevalent again.

Labor efficiency has been low, which is to be expected from transient workers and inexperienced youths. One club had a turnover of more than 60 during the season. Some may wonder where they come from. Recruiting and training new men is costly. Good men will not take temporary jobs when they can have permanent work. Clubs must recognize that fact.

The change to mechanized equipment and higher hourly rates of pay have been the excuse for reducing the number of workmen on the course. Some clubs have cut the force in half, others have tried to operate an 18-hole course with three and four men. It means less frequent mowing of the greens and skimping in other places. Everything goes fine for a year or two. Then troubles multiply because there has not been enough help to do the essential things. Power greens mowers save fewer man hours than is generally believed. The big saving is in efficiency during hot weather. Workmen are less exhausted and more fit physically to do other tasks afterwards.

Determine Work Requirements

Greenkeepers and club officials should analyze work requirements carefully and then provide a minimum crew of reliable workmen and provide permanent work for them. This skeleton crew can be augmented with students during the summer. Courses will be better, at little or no extra cost, when this is done.

The season of 1948 started out as a bad one for turf on golf courses in the section from Montana to New England. The winter was severe for greens and patches of matted creeping bent on some fairways. Recovery was very slow because the weather in early spring was dry with cold nights.

A mild fall and early snow in 1947 favored snow mold. Grass was green and in active growth when snow blanketed the ground in November. Very few greenkeepers had applied fungicide that early for snow mold prevention, and didn’t get a chance because the ground stayed covered until the midwinter thaw in February. Springlike temperatures in the seventies prevailed for a time then. Winter returned with a vengeance in March when temperatures dropped to 10 to 20 degrees below zero.

Snow mold was bad for two reasons. The grass did not stop growth before being blanketed with snow. Very few greens got the protective application of calomel-corrosive mixture, which is still the most effective fungicide for snow mold. One greenkeeper mixed calomel-corrosive mixture with topdressing and applied it on top of the snow. The amount of topdressing was one-half to two-thirds of a yard per green. His greens came through without damage.

Snow Mold Prevention

The use of nitrogenous fertilizer should stop in the snow mold belt sufficiently early—usually by mid-September—to give the grass a chance to harden off before the season stops. Fungicide should be used and applied preferably before the first permanent snow, otherwise greens should be cleared of snow, or the fungicide should be mixed with topdressing and applied on top of the snow. The rate for calomel-corrosive mixture should be 3 to 4 ounces per 1,000 sq. ft. Another treatment at half rate should be made after snow melts in midwinter, or early spring.

Another type of injury, similar to the wind-burn which devastated evergreens, was widespread. Afflicted greens started growth in early spring, but the young grass soon withered and turf on large areas became brown. The spring was very dry and windy at the start. Damage was similar to the “wind burn” of evergreens. The drying winds dried or desicated the plants. Greens on one course came through without a blemish, yet those on a course not more than a mile away were bad. Examination disclosed deep roots on the one hand and a few shallow ones on the badly damaged greens. The deeply
Here are two Jacobsen specialists that day in and day out turn in top notch cutting jobs on golf courses from coast to coast.

The Jacobsen Power Greens Mower enjoys wide preference by greenskeepers as “the” machine for keeping greens in finest condition. Smooth-cutting, it will not scalp undulating greens. A saving of 50 per cent or more in putting greens mowing costs is possible with the Jacobsen Power Greens Mower. Owners have reported savings of as much as $1,600 in a single season.

Your Jacobsen distributor will be glad to give you the full story about our complete line of power and hand mowers.

The smooth-cutting 1½ hp. Jacobsen Estate 24 power mower makes quick work of cutting tees and is a specialist on trimming jobs. With traction wheels behind cutting unit, it trims close to trees, shrubbery, buildings—greatly reduces tedious hand trimming. Differential drive permits sharp turns under power without scuffing or marring turf.
rooted turf resisted drying, but the others didn’t. Had it been possible to apply a little water one or two times a day, wind burn damage could have been prevented. Recovery was slow because of the cool weather. Some clubs patched with sod. Others seeded. Best recovery from seed was obtained where greens were spiked enough times to tear out the dead grass and enable seed to make contact with the soil. Even then late seedings did better than early ones.

Wind Burn Injury on Fairways

Wind burn injury was bad on some fairways. Damage was confined to the spots of matted creeping bent. The grass in these areas was shallow rooted. On some courses the grass started to turn green, then growth stopped, the grass began to wilt. Then it died and turned brown. Loss could have been prevented by watering in most cases.

Some clubs raked out the dead grass, added soil and seeded with Colonial bent. Germination and growth were poor because of the adverse spring weather. Others spiked or cross-disced enough times to destroy the mat and make a seed bed. Recovery came from the seed and from the old bent also. There were enough live joints on seemingly dead grass stems to produce new plants.

Matted fairways need periodic renovation or aerification with a disc, a rotary hoe, or a West Point aerifier. These implements will thin the turf and make for deeper root growth. There will be less wind burn injury, and localized dry spots will not occur in summer. Aerification should be done in fall and again in spring when turf is badly matted.

The actual growing season was about average, too wet in some places and too dry in others. Courses in the wet areas complained about crabgrass and clover on fairways and scald on greens. Those in dry regions had brown fairways and greens developed localized dry spots. Daytime wilting was troublesome in both places.

Too Much Shallow Rooted Turf

There was altogether too much shallow rooted turf on greens. It is hardly reasonable to suppose that acidity and faulty fertilizer practices were the sole causes. Compaction, overly wet soil throughout the spring and early summer, and an excessively matted turf were more likely reasons. They restrict soil aeration. Roots always stay near the top when the soil below lacks oxygen.

Compaction and other bad soil conditions, such as sand and peat-like layers, can be corrected by forking, by drilling or by aerifying. Hand forking is slow and tedious, drilling takes about a day for a green, and the aerifier will do all 18 greens in about a day. Hand forking and drilling disfigure the surfaces least. Greens that are especially bad should be aerified spring and fall for several years. Most or all of the cost will be recovered in lessened daytime hand watering in hot weather.

Matted turf on greens started to become bad during the war from infrequent mowing. The condition is aggravated by scalping rollers on the front of greens mowers. The situation is getting worse rather than better. There are altogether too many greens with too much grass on them.

Matted turf is the principal cause of localized dry spots on greens. Turf on the dry areas wilts and dies in hot weather unless soil moisture is restored by forking or other means. Sprinklers will not wet the soil below the top inch. Matted greens should be cross-raked and cut close.
several times before growth starts next spring. They should not be topdressed until a tight turf is obtained. After that, greens should be mowed every day, except one at the most. Greens on the best courses are cut at 3/16 inch. Mowers should never be set higher than 5/16 inch, and scalping rollers should be eliminated where possible, otherwise the comb should be used.

Bringing the Greens Through

There is a tendency to spike greens during the season. It is done every 7 to 14 days. Spiked greens take water better. Spiking helps prevent dry spots, but will not cure them. Holes are not sufficiently large or deep enough. A spiker should not be used on a hot day when grass is wilting. The grass around each spike hole will wither, turn brown and die. Then the green looks like dollarspot has been bad.

Greens that get little or no topdressing, or where manure compost is not a constituent of the mixture, need more potash than is contained in fertilizers with only 2 to 4 per cent potash. Programs which have provided adequate amounts of phosphoric acid and potash in spring and fall, with nitrogen as needed throughout the growing season have been very successful. The quantity of potash should be not less than 8 to 10 pounds of actual potash per 1,000 sq. ft. each year.

Chlorosis was severe on some greens. It was mistaken by some for disease and others blamed chemicals. At the start the grass is golden yellow in color (hence the name chlorosis - lack of color) and leaves are soft and tender. Normal color generally returns in a day or two. When it doesn't, the grass dies, turns brown, and the spot looks like scald or a burn from chemicals or fungicides.

Temporary iron deficiency is the cause. That is the reason for the golden yellow color. Iron is a constituent of chlorophyll, which is the green substance in plant leaves. Chlorosis is most common after heavy down-pouring rains which saturate the soil temporarily. Those who used ferrous sulphate stopped loss of grass. Best results were obtained by spraying 1/2 to 1 pound of copperas, or ferrous sulphate on a green and not watering in. The iron was absorbed by the leaves and restored normal color in 12 to 24 hours. During a month of wet weather in Oklahoma it was necessary to spray once a week with the iron on several courses.

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Frequent use of three-gang spiker on greens at Maple Lane CC, Detroit, keeps them in top shape with minimum of water.

Tree roots in greens and tees continue to cause trouble. It is impossible to keep grass green along the edges of some watered fairways because of them. Cottonwoods, willows, poplars, and elms are especially bad. Their roots are apt to clog tile lines also. Trouble occurs in hot weather. The tree roots rob the soil of its moisture. Surfaces become hard, and the soil underneath is compact and dry. Sometimes the offending trees can be dispensed with. Otherwise, trenching to sever the tree roots and facing the trench with sheet metal, or cutting the roots with a root pruner, such as the one made by Jim Haines of Denver CC, is the best thing to do.

Ants are always a nuisance on sandy greens. Chlordane has solved that vexing problem. It has done a good job on cut worms and sod webworms also. Rates have varied, but from 1/2 to 1 pound of 40 to 50 per cent material on an average size green has given good results in the Midwest. Effects have lasted four to six weeks.

The results with 2, 4-D for weed control have been extremely good for broadleaf

(Continued on page 90)
John Darrah, superintendent of the Olympia Fields Country Club, Olympia Fields, Illinois, says: "'Tersan' helps us keep a smooth, true putting surface on all our greens. It is a powerful ally in the battle to control fungous diseases, especially during hot, humid weather. And fungus control with 'Tersan' is safe because there is no danger of building up residue enough to cause toxicity."

BILLIARD-TABLE SMOOTHNESS is assured at all times on this 18th green—and all others at Olympia Fields—by regular applications of "Tersan." Mr. Darrah finds "Tersan" highly effective for preventing dollar spot, brown patch and other fungous diseases... without any danger of burning the greens.
protects its greens with TERSAN* ~

"A LITTLE GOES A LONG WAY"—says Wilbur Ellis of the Olympia Fields staff, who is shown here mixing "Tersan" into a spray solution. "Tersan" mixes readily with water—and it's safe and easy to handle so that even inexperienced help can use it. It will not shock, yellow, or retard grass growth, even in hot weather.

Easy to apply—"Tersan" fungicide provides a fine spray for more even coverage. Du Pont SEMESAN* and Special SEMESAN* are available for those who prefer mercurial fungicides.


DU PONT

Turf Fungicides

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

Listen to Du Pont "Cavalcade of America" Every Monday Night—NBC Network October, 1948
The Louisville Country Club is in the milk business.

It all started early this spring when several members noticed that some of the caddies looked the worse for winter wear. There were pinched faces, not yet browned by the warm Kentucky sun, and there were other signs that a trained observer would not overlook.

They began to watch what the caddies drank in the way of refreshment between rounds. Pop topped the list, of course, and occasionally a caddie would order a bottle of milk. When it became apparent that these milk-drinking caddies were healthier looking, the members began to ask a few questions.

"No sir, I never drink it." "Milk? Why I don't care much for the taste." "Naw, I ain't gonna drink that stuff," and so on. A few caddies answered rather wistfully, "Sure, I like milk. Drink all I can get. No, sir, we don't have none at home, much."

Here was a challenge. A group of American boys associated daily with club members who enjoyed the best, and these boys were carrying heavy bags of clubs over 18 gruelling holes without a normal ration of milk for such work.

An informal committee began to watch the progress of caddies from the ninth hole to the refreshment stand to the tenth tee. In almost every case a bottle of soda was stowed away for fuel on the back nine.

"Once we'd become conscious of this condition," said a member, "we weren't able to forget it. Youngsters need milk for bones, teeth and general health. We didn't like the idea of these boys growing up without a chance to develop physically."

A prominent dairyman belongs to the club. It wasn't long before he found himself confronted by a small earnest group of members.

Would he give a special price on half pint bottles of milk for the caddies? He'd go farther and give it all for the first season. Never mind the cost.

The next problem was the golf pro, Eddie Williams. Part of his revenue comes from the caddy refreshment stand at the Louisville Country Club. What would Eddie think about losing a portion of his soft drink income?

Mr. Williams' response was typical. "I think it's a very good idea," he said. "Let me take charge of giving out the milk as my share."

The first day of the great idea, four slightly confused caddies were herded by four club members over to the Caddie Milk Bar. "What's dis all about?" asked one suspiciously. "Ain't gonna buy no milk." Another picked up his bottle gingerly and asked, "How does it taste?" He had never tried milk in his life.

In a few minutes four milk bottles were set back empty on the counter and the first foursome moved somewhat consciously and very healthily toward the tenth tee. The plan was launched.

Before long it was found necessary to issue tickets to the caddies dated for use that day and that day only as a few efforts to save up a supply of milk for resale were uncovered.

As the idea caught hold, members could be seen preaching earnestly to their caddies on the subject of butterfats and