



USGA JOURNAL

AND
TURF MANAGEMENT

THE CAPTAIN OF THE WALKER CUP TEAM



Charles R. Yates, of Atlanta, Ga., will lead the United States side against the British in the fourteenth Match for the Walker Cup at the Kittansett Club, Marion, Mass., in September. He played on the 1936 and 1938 Teams, won the British Amateur in 1938 and authored a famous golfing parody of the poem "Trees."

JUNE 1953



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June, 1953

THROUGH THE GREEN	1
HOW GREAT IS BEN HOGAN?	5
WHAT MAKES A SENIOR	7
HOW THE HANDICAP SYSTEM WAS CHANGED	10
A GOURLAY BALL FOR "GOLF HOUSE"	12
OAKMONT AND THE OPEN	14
THE USGA AND THE COLLEGES	15
THE WOMEN'S OPEN	16
LANDSCAPING A GOLF COURSE	18
THE REFEREE: DECISIONS BY THE RULES OF GOLF COMMITTEES	22
TURF MANAGEMENT: USGA GREEN SECTION	
BENTGRASS PUTTING GREENS AT CHATTANOOGA	25
CHINCH BUG CONTROL	27
TIFFINE (TIPTON 127) TURF BERMUDAGRASS	
B. P. ROBINSON AND GLENN W. BURTON	30
WHAT ABOUT MALEIC HYDRAZIDE?	30
IT'S YOUR HONOR: LETTERS	33

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USGA COMPETITIONS FOR 1953

Walker Cup Match—September 4 and 5 at the Kittansett Club, Marion, Mass. Men's amateur teams, Great Britain vs. United States.

(Dates entries close mean last dates for applications to reach USGA office, except in the case of the Amateur Public Links Championship. For possible exceptions in dates of Sectional Qualifying Rounds, see entry forms.)

<u>Championship</u>	<u>Entries Close</u>	<u>Sectional Qualifying Rounds</u>	<u>Championship Dates</u>	<u>Venue</u>
Open	Closed	June 1	*June 11-12-13	Oakmont C. C., Oakmont, Pa.
Women's Open	June 15	none	June 25-26-27	C. C. of Rochester, Rochester, N. Y.
Amateur Public Links	†June 8	‡June 21-27	Team: July 11 Indiv.: July 13-18	W. Seattle G. C., Seattle, Wash.
Junior Amateur	July 6	July 20	July 29-Aug. 1	Southern Hills C. C., Tulsa, Okla.
Girls' Junior	August 7	none	August 17-21	The Country Club, Brookline, Mass.
Women's Amateur	August 10	none	August 24-29	Rhode Island C. C., W. Barrington, R. I.
Amateur	August 17	Sept. 1	Sept. 14-19	Oklahoma City G.C.C., Oklahoma City, Okla.

*Championship Qualifying Rounds at Oakmont Country Club and Pittsburgh Field Club, June 9 and 10.

†Entries close with Sectional Qualifying Chairmen.

‡Exact date in each Section to be fixed by Sectional Chairmen.



Widow's Tale

William N. Beveridge, of Milwaukee, says that on opening day a customer came into his golf shop for a Band-Aid to cover a blister raised by his wedding ring. The customer was not wearing the ring and related that his wife had concurred in this procedure with the remark that he could keep it off all summer as she didn't consider herself married to him during the golf season.

Charley Yates

There figures to be a good deal of singing along with the golf when the Walker Cup Teams meet at the Kittansett Club, in Marion, Mass., next September. Charley Yates, who will Captain the United States side, is as famed for his propensity to break into song as he is for his general good-fellowship.

When he was called up to receive the trophy after his victory in the British Amateur at Troon, Scotland, in 1938, he told the assembled Scots a little old white lie to the effect that he wasn't much of a speech-maker and, on the basis of that plea, instead sang "A Wee Doch an' Doris" for which he will be forever loved in Scotland.

In the course of the 1936 Walker Cup Match at the Pine Valley Golf Club, in Clementon, N. J., he composed and ren-

dered many times the following famous parody on "Trees:"

"I think that I shall never see
"A golf course tough as Pine Vall-ee,
"With trees and sand traps everywhere
"And divots flying through the air—
"A course laid out for fools like me,
"Where only God can make a three."

The Open Play-Off

The regulations governing the USGA Open Championship have been changed to eliminate the possibility of an extended play-off in the event that the Championship results in a tie.

As in the recent past, any tie will be played off at 18 holes, stroke play. However, under the new regulation, if such a play-off results in another tie, the tied players will immediately continue to play hole by hole until the winner is determined.

In the past, ties in the Open Championship have been played off at either 18 or 36 holes, regardless of how many such play-offs might have been required.

Amateurs and Home Pros

It is now twenty years since an amateur has won the USGA Open Championship—and twenty-three years since an amateur has won the British Open.

The last Amateur winner of our Open Championship was Johnny Goodman. He won by a stroke over Ralph Guldahl at the

North Shore Golf Club, in Glen View, Ill., in 1933. The last amateur winner of the British Open was Bob Jones, who made it a part of his "grand slam" in 1930.

Marvin "Bud" Ward, now a professional himself, came closer than any other amateur to winning our Open in the last two decades. He finished fourth, but only one stroke out of the triple tie, in 1939. He was also fifth, five strokes behind Lew Worsham and Sam Snead, in 1947.

The possibility that Lew Worsham, professional at the Oakmont Country Club, might win the Open there this month has raised in a good many locker rooms the question of whether a home-club player ever has won the Open. The answer is "yes"—but only one. Horace Rawlins was the assistant professional at the Newport (R.I.) Golf Club when he won the first Open there in 1895.

Herbert Jaques

The death of Herbert Jaques, of Boston, last month deprived the game of one of its most distinguished statesmen and gentlemen.

Mr. Jaques' father was President of the USGA in 1909 and 1910. The son followed the same path and became President of the USGA in 1933 and 1934. As Chairman of the Implements and Ball Committee, he played a key role in the development of the specifications for the present ball, which became standard on January 1, 1932. He was also a student of the Rules of Golf, and even after his retirement as President he continued to attend Rules of Golf Committee meetings and to offer the soundest advice on the subject.

He was a sportsman and a gentleman in the highest sense of those terms.

Greenwich's Old Trophy

We turned up last summer the story of the Hunter Medal, which was placed in competition at the Richmond County

Country Club, on Staten Island, N. Y., in 1895 and may be the oldest trophy in continuous competition in this country.

More recently we turned up the story of the Victoria Diamond Jubilee Challenge Cup, which has been in competition at the Greenwich (Conn.) Country Club since 1897 and is certainly another of the oldest golf trophies.

The Victoria Diamond Jubilee Challenge Cup is, in point of fact, a silver mug with four bone handles, and is almost completely covered with inscriptions of the names of winners. The first winner was Frank W. Sanger, in 1897, and in the next two years the winners were George A. Phelps and Findlay S. Douglas, the USGA Amateur Champion at the time and later President of the USGA. There were no competitions during the war years. John G. Powers won last year.

The Greenwich Country Club is, of course, the lineal descendant of the old Fairfield County Golf Club, one of the oldest clubs in the country. The Victoria Diamond Jubilee Challenge Cup was presented to the Fairfield County Golf Club in June, 1897, the occasion being obvious from the name, by an Englishman named F. E. Vivian Bond, who was only a member while temporarily in this country. Yet his unostentatious gift has become over the years one of the Club's most treasured possessions, and considerable ceremony now surrounds the competition for it each year.

One Amateur Championship

Recently, twenty prominent amateurs petitioned for an Amateur Championship at stroke play, in addition to the traditional Amateur Championship at match play. The Executive Committee was unable to grant the petition, and its reasons may be of interest to many in golf. It pointed out that:

One Amateur Championship and one Amateur Champion each year seem adequate. There were two "national amateur championships" in 1894, and the result-

ing confusion led to the formation of the USGA.

Match play is generally regarded as the most appropriate form for amateur golfers. An amateur is presumed to be one who plays as an avocation, and match play gives such golfers a wider margin for error—a bad hole in match play costs nothing more than the hole; a bad hole in stroke play may cost the championship.

The Open Championship provides ample opportunity for amateurs to test their stroke-play ability, not only against professionals but against other amateurs. Last year, nearly half the entrants in the Open were amateurs and 36 of the 162 players in the Championship proper were amateurs.

Bernard Darwin Retires

On May 1, Bernard Darwin retired as golf correspondent for THE TIMES of London and left an immense void in golf literature. Mr. Darwin has written golf for THE TIMES for 45 years, and always with insight, love and a flavor that was all his own. In a country which boasts many superior golf writers, he became preeminent in the art. Fortunately, the world of golf letters is not losing Mr. Darwin's writing entirely. He plans to continue his contributions to the magazine COUNTRY LIFE.

One reason for the excellence of Mr. Darwin's writings undoubtedly is the contribution he has made to the game. He was an outstanding amateur player and served as playing Captain of the first British Walker Cup Team. He became an authority on the Rules and as Chairman of the Rules of Golf Committee of the Royal and Ancient Golf Club of St. An-

Architects Suggest



The 1953 officers of the American Society of Golf Course Architects, elected during the annual meeting at Ojai, Cal., are, from the left: William H. Diddel, of Ormond Beach, Fla., vice-president; William F. Gordon, of Doylestown, Pa., president; and James H. Harrison, of Turtle Creek, Pa., secretary-treasurer

draws, Scotland, redrafted the British code which became effective in 1950.

During its annual meeting at Ojai, Cal., the American Society of Golf Course Architects agreed on the following statement of policy, which we certainly endorse to chairmen of golf and green committees:

1. We favor the development and maintenance of the rough to make it an effective factor in the strategy of play.
2. We favor the contouring of greens to promote interest in the department of the game where half of the strokes are played and to exert proper influence in the play of the hole.
3. We favor the placement of hazards guarding greens in positions which reward accurate play and do not sacrifice the demands of good golf to the mechanics of greenkeeping.
4. We favor the construction of a lim-

ited number of strategic hazards, as opposed to the building of many penal traps.

5. We favor a system of bunkering which is based on the play of experts and with the object of developing the skill of those less adept and providing a minimum of interference with the play of high-handicap groups.

6. We are opposed to the use of grasses which have not been thoroughly proven.

If You Want to Help

Sgt. Marion M. Thomas, Jr., USAF, who is stationed at the Stead Air Force Base, near Reno, Nev., has put two and two together and developed an idea which may be interesting to Clubs which might want to accomplish a worth-while objective through tournament play.

Sgt. Thomas has noted the number of tournaments and exhibitions which are conducted for charity and also the appeals for blood for our fighting men in Korea. Combining these two observations, he suggests that the entry fee for one tournament or the admission fee for one exhibition might well be a pint of blood.

Low Scores By Women

There have been so many low scores by women in recent years that the record is being obscured and a particularly fine round by Mrs. Opal S. Hill, back in 1937, is in danger of oblivion.

On September 1, 1937, Mrs. Hill scored a 66 at the 6,199-yard course of the Indian Hills Country Club, Kansas City, Mo., in the first match-play round of the Missouri women's championship, in which she won both the medal and the title. Mrs. Hill holed out for wins on the first two holes and then made an ace on the 157-yard third hole. This prompted her to hole all putts to the finish in an effort to better her previous record of 73. Her card read:

	Out									
Par	5	6	3	5	4	4	3	4	4	—38
Mrs. Hill	5	5	1	3	3	4	3	4	4	—32

	In									
Par	4	4	5	3	5	5	5	4	5	—40—78
Mrs. Hill	4	4	3	3	4	4	5	3	4	—34—66

To the best of our knowledge, this is the first 66 scored by a woman in competition, but we would appreciate further information on this subject if any is available.

There have been, of course, other 66s by women in competition. Grace Lenczyk scored a 66 in the qualifying round of the Women's Western Open at the Oklahoma City Golf and Country Club in 1949; and Mrs. George Zaharias scored another in a Weathervane tournament at the Lakewood Country Club, in Dallas, in 1951.

Patty Berg holds the record for low scoring by women over 18 holes in competition, to the best of our knowledge. She scored a 64 in the first round of the Richmond (Cal.) Open in April, 1952, and won the 54-hole tournament with a 210, six under men's par.

Secretaries Retire

Cleveland and Providence, two real strongholds of golf, have suffered twin losses in the resignations of the secretaries of their local golf associations.

Dick Whitmore resigned as of May 1 from the Cleveland District Golf Association after serving the game for twenty-seven years. Charley Hartley resigned on April 27 from the Rhode Island Golf Association after nineteen years of service to the game. We shall miss their good offices, but we hope not their presence when golf is being played.

The new secretary of the Cleveland District Golf Association is Harry C. Pollock. The new secretary of the Rhode Island Golf Association is Eddie Perry. We wish them happiness in serving the welfare of the game.

How Great Is Ben Hogan?

By HERBERT WARREN WIND

AUTHOR OF "THE STORY OF AMERICAN GOLF"

Not for a very long time—perhaps, not since Bob Jones won them all in 1930—has a performance by a golfer excited the admiration of the game's insiders as did Ben Hogan's four rounds over the Augusta National last April when he lowered the Masters record by five strokes simply by not playing one loose shot in 274.

This happened many weeks ago and ordinarily it would have been pretty well digested by now. Yet here we are, still talking about Hogan's display and trying to assess it properly. It was, to use Bernard Darwin's favorite adjective, that "indecent." Nobody, not even Hogan, was supposed to be able to play golf that well.

How great a golfer is this nerveless man who seems to hit the ball straighter as the gallery and pressure increase, who reels from the jolt of missing a five-footer for a birdie on the fifty-seventh to the extent of hitting his tee shot on the next hole, the par-3 fifty-eighth, one foot from the cup?

Well, he can no longer be passed off as "the best golfer pound for pound who ever lived," "the finest exponent of the steel-shaft swing," or with the other discreet qualifications used by those of us who knew how good Ben was but were jealous about protecting the standings of our favorite Champions of earlier eras, in whose victories we felt a greater sense of participation than Ben's austere personality permits.

Yet again, I wonder if we *really* knew how good Ben was before this last Masters. Between 1948 and 1952, we had watched him, before his accident and after his brave recovery, win his first Masters, his second PGA and three USGA Opens in four attempts. When Ben faltered last year on his final rounds in both the Open and the Masters, just as if he were human, a good many of us privately

believed that he had passed his peak. So what did Ben do? He proceeded to unfurl what were undoubtedly the four most masterful consecutive rounds of his tournament career and what may well be the four most nearly errorless rounds any golfer ever produced in a major competition.

It is certainly understandable if, since Augusta, a number of reliable critics have decided that Ben is, without any qualifications whatsoever, the greatest golfer who ever lived. A golfer's exact historical rating, though—as the admirers of Vardon and Jones and of Hagen, Sarazen and Nelson have pointed out—is a difficult thing to determine in a game in which the equipment and the playing conditions have undergone such drastic changes over the years. Perhaps it would be fairest to put it this way: in the long history of golf, there probably never has been a better golfer than Ben Hogan.

What Hogan Must Prove

This disposition to elevate Hogan to a status comparable to that of Vardon and Jones is widespread but not by any means unanimous. The most interesting dissent comes from that band of traditionalists who claim they cannot go along with such a rating until Ben wins a British Open and demonstrates he is equally a Champion at "that other kind of golf"—controlling the ball when the wind is ripping hard across a British links, with its snuggger fairway lies, its rougher rough and its hard, unwatered greens.

Whether or not you agree with this reasoning, the implicit suggestion that Ben take a crack at the British Open is one that, indeed, stirs a golfer's imagination. How would Ben, who has never played a competitive round in Britain, make out in their Open? Would he be able to adapt his magnificent technique

to those foreign conditions and be the same master tactician, the same dynamic machine relentlessly fashioning one just-about-perfect shot after another?

The guesses vary.

The we're - not - so - sure - Ben - could-do-it school has doubts about his long approach-putting, but the most provocative point they raise is based on the assumption that in very windy conditions Ben might be blown off the fairways and, on some courses, be faced with the one shot he has apparently not mastered: the recovery from high, tough grass. In our 1951 Open at Oakland Hills, they continue, Ben played some shots from the rough with an almost unbelievable lack of authority. On the fifty-first hole, for example, after driving into the rough along the right on this medium-length dog-leg par 4, Ben hooked a weak, ducking iron across the fairway into the rough on the left, fluffed his third halfway to the green into a bunker and had to settle for a 6. The exaggerated flatness of Ben's swing, which accounts for his tremendous hitting power, is his undoing in tall grass, this school avers. His blade must force its way through many more inches of impeding grass than the blade of the golfer who attacks the ball with a more sharply vertical arc.

Hogwash, the Hogan-could-do-it school answers. All Ben would need would be a few weeks of practice to make all the necessary adjustments—he has always managed to modify his repertoire of shots to meet the different requirements of the courses selected for our major tournaments.

The precise dates of the USGA and British Opens vary each year, of course, but there is usually at least three weeks, ample tune-up time, between the conclusion of ours and the start of the British. Let us hope that at least one of these summers, while he is at the top of his game, Ben will arrange his schedule to include playing in the British Open. If he did, it would be a wonderful thing for international golf. And, on the other hand,

it would be a downright shame if a golfer of Ben's rare genius were to pass from the scene without taking at least one crack at the oldest of the great Championships.

USGA PUBLICATIONS OF GENERAL INTEREST

THE RULES OF GOLF, as approved by the United States Golf Association and the Royal and Ancient Golf Club of St. Andrews, Scotland, effective January 1, 1952 (1953 edition). Booklet, 25 cents (special rates for quantity orders).

ARE YOUR LOCAL RULES NECESSARY?, a reprint of a USGA Journal article containing recommendations regarding local rules. No charge.

THE RULE ABOUT OBSTRUCTIONS, a reprint of a USGA Journal article. No charge.

USGA GOLF HANDICAP SYSTEM FOR MEN, containing recommendations for computing Basic and Current Handicaps and for rating courses. Booklet, 25 cents.

HANDICAPPING THE UNHANDICAPPED, a reprint of a USGA Journal article explaining the Callaway system of automatic handicapping for occasional players in a single tournament. No charge.

TOURNAMENTS FOR YOUR CLUBS, a reprint of a USGA Journal article detailing various types of competitions. No charge.

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THE UNITED STATES GOLF ASSOCIATION, a pamphlet describing its origin and activities. No charge.

BETTER LAWNS TO COME, a reprint of a USGA Journal article. No charge.

TURF MANAGEMENT, by H. B. Musser (McGraw-Hill Book Co., Inc.), the authoritative book on greenkeeping. \$7.

USGA JOURNAL AND TURF MANAGEMENT, a 33-page magazine published seven times a year and containing authoritative information on the Rules of Golf, USGA championships, handicapping, amateur status, greenkeeping methods, clubs and ball, new trends and the play of the game. \$2 a year.

These publications are available on request to the United States Golf Association, 40 East 38th Street, New York 16, N. Y.

What Makes A Senior

By JOHN P. ENGLISH

USGA ASSISTANT EXECUTIVE DIRECTOR

Sandy Herd won the British Professional Match Play Championship when he was 57, and the Hon. Michael Scott won the British Amateur when he was 55. In spite of these phenomena, it is well established by the studies of Dr. Harvey C. Lehman, of Ohio University, as well as by observation, that golfers in their early 50s are normally no longer of championship caliber. Records of the United States and British Amateur, Open and Professional Championships reflect that 169 winners have been between the ages of 20 and 34. Only 57 have been older than 34, and only Herd and Scott were 50 or older.

The increasing popularity of senior golfing organizations is therefore an appropriate development.

The oldest of these is, of course, the United States Seniors' Golf Association, whose forty-eighth Championship is taking place this month at the Apawamis Club, in Rye, N. Y. It was organized in 1917 to conduct a Seniors' Tournament which had been held at the Apawamis Club, since 1905. Membership is limited to those who have reached the age of 55 and are members of golf clubs which belong to the USGA.

There are, too, the Western Seniors' Golf Association, the American Seniors' Golf Association, the North and South Senior competition at Pinehurst, N. C., and numerous sectional and state senior associations. Clubs also are scheduling special events for their senior members, so that a senior now can enjoy a whole series of competitions any season. In some of these, the minimum age is 50 years, rather than 55.

An Intriguing Fact

The present scale of senior golf has, however, developed one intriguing fact.

The champions of thirty years ago are not, generally speaking, the senior champions of today.

In last year's United States Seniors' Golf Association Championship, Thomas C. Robbins, 60, of New York, won for the second year in succession with 73-74-147. Paul H. Hyde, of Buffalo, N. Y., and Noble Miller, of Canandaigua, N. Y., tied for second at 150, in a field which included Francis Ouimet, of Boston, a former Amateur and Open Champion.

In last year's Western Seniors' Golf Association Championship, Frank Justin, Jr., 59, of Harvard, Ill., led with 78-72-150. Allen R. Rankin, of Columbus, Ohio, and Allan M. Loeb, of Chicago, tied for second at 152.

In last year's North and South senior tournament, Judd Brumley, 58, of Greenville, Tenn., defeated Norfleet P. Ray, of Pinehurst, N. C., 5 and 4, in the final. Dr. G. R. Love, of Oconomowoc, Wis., and Charles Evans, Jr., of Chicago also a former Amateur and Open Champion, were the losing semi-finalists. Mr. Robbins was the medalist, with a 69.

In last winter's American Seniors' Golf Association tournament Mr. Robbins, was the medalist with a 73 and defeated Mr. Brumley, 3 and 2, in the final. Mr. Evans was a participant in all of the latter three tournaments.

For purposes of comparison, the members of the Walker Club Team of 1922 were Charles Evans, Jr., William C. Fownes, Jr., Robert A. Gardner, Jesse P. Guilford, Robert T. Jones, Jr., Max R. Marston, Francis D. Ouimet and Jess W. Sweetser.

There is, of course, no single explanation for the emergence of new champions with the passing of the years.

Robinson Murray, of South Duxbury, Mass., the New England Senior Champion, believes that five factors are involved.

"First," he says, "many men are not so circumstanced as to begin the game until their contemporaries are already tournament golfers.

"The second point is enthusiasm. An older man may find he loves the game. He gets his pleasure in making the ball behave. The younger star may well find his enthusiasm waning as he gets older.

"Thirdly, the older man must keep his health. How few senior golfers look their age! Time inevitably weeds out many of those who were splendid golfers in their younger days but who have succumbed to arthritis, misplaced sacroiliacs or any one of a score of nature's handicaps.

"Another factor weeds out others. There must be opportunity to play. Enthusiasm and health are of no use without opportunity. Financial ability, freedom from worry, favorable location—these and many other factors enter into the picture. A precocious athletic youth does not necessarily carry with it the ability to support a country-club standard of living as the years pass by.

"Finally, we find much of the answer in the nature of the game itself. After all, what advantage does the young, enthusiastic par-shooter have over the older man save the ability to pound the living daylight out of the ball. The older men putt as well, they pitch as well to the greens and they have been known to hold their tempers and play more coldly and calculatingly."

Harrison Smith, of Oklahoma City, another prominent senior, suspects a sixth factor:

"Golfers of championship caliber, with a few exceptions, developed their games in their teens. Their youth permitted them to adopt the power swing. On the other hand, the best seniors, with a few exceptions, started to play in their early

or late 20s and adopted a controlled swing. The senior continues to improve his game by more accurate chipping and putting, while the power swinger's game tends to disintegrate with the loss of his long and accurate wood shots."

Mr. Evans, who does as well as any of the champions of yesteryear in senior competition, suggests:

"Perhaps the outstanding player of my day is the worker of today and the worker of my day is the outstanding player of senior golf. Many must work hard in their old age because they did not realize that their play-day was ended."

Fred L. Riggan, Sr., of Port Huron, Mich., President of the American Seniors' Golf Association, theorizes that "as the present senior golfers who are really expert grew older, succeeded in their businesses and had more leisure time, they developed a latent ability at golf which had been there all the time. Those who were top golfers in their younger days may feel that too much is expected of them now. The edge is off their competitive spirit. You and I know that the will to win and confidence in one's game are probably as important factors in victory as real golfing ability."

Former Champions' Thoughts

Speaking for those who were outstanding in their youth, Mr. Gardner, the Amateur Champion in 1909 and 1915, admits that the edge is off his competitive spirit. "Perhaps we who competed in the old days had our fill of competition years ago, when that empty feeling in our stomach was worth-while. I just cannot apply myself and concentrate to the former degree.

"Players who are now prominent in senior competition and were not prominent in earlier days have a competitive spirit, a willingness to take infinite pains on every shot and a serious purpose that I for one cannot match any more.

"My putting and short game have largely gone to pieces, and I find on comparing notes that they have failed

with others in the same way as they have gotten older. Why that should be I don't know. Is it psychological?"

S. Davidson Herron, of Pittsburgh, the 1919 Amateur Champion, feels much the same way. He had his fill of competition and his taste of glory when he defeated Robert T. Jones, Jr., in the Amateur final. He was 21 at the time and Jones 17. The responsibilities of starting a career and raising a family soon overtook him, and now he prefers informal four-balls to tournaments, senior or otherwise.

When They Started

It certainly seems, too, that circumstances did conspire to delay most of our leading seniors in their pursuit of senior golf.

Mr. Robbins first played at the age of 31 in San Juan, Puerto Rico. He started as a left-hander, to boot, although he was quickly converted to right-handed play. His talent must have been simply latent. He took thirteen lessons and practiced for hours between each lesson before he ever played a round. Within a month after starting to play, he was in the high 70s.

Mr. Brumley started to play comparatively early, for a top-ranking senior, but he explains: "Thirty years ago I discovered I had been playing the grand game of golf for eight years the wrong way. I went to a professional, and he changed my grip from the baseball type to the overlapping. I improved rapidly after that.

"I have always lived in the delightful but small town of Greeneville. We have a short nine-hole course of nineteen hundred yards. I am certain that not having access to a standard-length course was detrimental to my game."

Dr. Love started to play when he was about 30. He was raised in a small town, and there was no golf course within sixty miles of his home there.

Mr. Smith was playing to a 12 handicap at the age of 30. He was down to a 4 handicap at the age of 60 and by that

time had won several senior tournaments.

C. J. Farley, of Grand Rapids, Mich., began to play when he was about 25, but not until he was 30 did he emerge from the 90s and not until his late 30s was he playing good golf. He felt he was playing the best golf of his life when he was 60.

Mr. Riggins did not take up golf until he was nearly 30. When he was 50, he scored in the 60s four times, and he is sure that was his best year.

Mr. Murray caddied for two or three years as a boy, but the necessities of earning an education prevented him from playing again until he was 25. Then he was caught up in World War I and later the responsibilities of raising a family, so that he was about 40 when the opportunity to play regularly finally presented itself.

Paul H. Hyde, of Buffalo, N. Y., also started as a caddie but points out: "There was no money in my family for traveling in those days, and for many years after, it was school, marriage, children and to an extent lack of money that kept tournament golf out of my reach."

Elfred Beck, of Tulsa, Okla., took up the game at the age of 34. "It took me years," he relates, "to learn how to relax my right hand in the golf swing and almost as long to learn the power of concentration." He believes he played his best golf at the ages of 50 and 51.

Parran C. Jarboe, of Cochituate, Mass., several times New England Senior Champion, also began to play when he was 34 and did not reach his peak until he became a senior. "All those years, I never had any fixed idea of how to swing or how I hit the ball," he says. "Now I seem to have a clear idea and a grooved swing."

Whenever they started to play, however, they all now have one thing in common. Mr. Hyde phrased it simply when he said: "The enjoyment of the game increases every year. One makes some very fine friends every time he is lucky enough to be able to attend any kind of a senior tournament."

How the Handicap System Was Changed

By WILLIAM O. BLANEY

CHAIRMAN, USGA HANDICAP COMMITTEE

The revised USGA Golf Handicap System for Men combines for the first time in a unified system the ideas of the two principal schools of thought in golf handicapping.

One school believes that handicaps should be based on a relatively small percentage of a player's better scores, taken from a large number of scores made over a considerable period of time. Handicaps so computed have become known as "Basic Handicaps" and are designed to indicate a player's inherent ability to play golf.

The other school believes that handicaps should be based on a larger percentage of a smaller number of recent scores, so that a player's handicap will indicate the prevalent or at-the-moment state of his game. Such handicaps have become known as "Current Handicaps" and tend to fluctuate more frequently than Basic Handicaps.

Until this year, the USGA has recommended only Basic Handicaps. However, it became evident that for a handicap system to become truly national, it must include methods of computing both Basic Handicaps and Current Handicaps.

That portion of the revised system dealing with Current Handicaps is based almost completely on the current ability handicap system originated and developed by Thomas G. McMahon and the Chicago District Golf Association, as that was far and away the most popular of the current-type systems.

In order to combine the two types of handicaps into a unified system, it became necessary to make a few changes in our former recommendations for Basic Handicaps. These changes actually have improved Basic handicapping, because they have corrected the few faults that were evident in our former methods.

The booklet explaining the revised system has been distributed to all Member Clubs, and additional copies are available at "Golf House" at 25 cents a copy.

Basic Handicaps continue to be computed from the total of the lowest 10 of a player's last 50 scores. When a player has posted fewer than 50 scores, his handicap is computed from a figure equal to 10 times the average of the lowest 20 per cent of all his available scores. When using this method, frequent handicap revisions are not necessary; the inherent ability of an individual to play the game does not change to any great degree except over an extended period of time, such as a year or more.

Current Handicaps are computed from the lowest 10 of a player's last 15 scores, the same method as used under the Chicago District Golf Association system. When a player has posted fewer than 15 scores, his handicap is computed from a figure equal to 10 times the average of all his posted scores, after eliminating the five highest. This method calls for more frequent handicap revisions, as the purpose of Current Handicapping is to follow the ups and downs of a player's game. Revisions every two weeks are recommended.

Use of both Basic and Current Handicaps in the same event must not be permitted, as the results would be inequitable. The total of the lowest 10 of a player's last 15 scores, in practically every instance, will be higher than the total of the lowest 10 of his last 50 scores, thereby giving him a Current Handicap higher than his Basic Handicap.

The 10-score totals obtained under either the Basic or the Current Handicap computation method are applied to the new USGA Handicap Differential Chart to determine the player's handicap. The

Handicap Differential Chart is radically different from either the former USGA chart or the Chicago District Golf Association chart, but the results are not too dissimilar. The new chart is called a "Differential Chart" because handicaps are determined from the *difference* between the total of the player's lowest 10 scores and a figure equal to 10 times the official rating of the course on which the scores are made. In this way, one set of figures is used for all course ratings and the need of a multi-columned chart covering ten or twelve different course ratings is eliminated.

Current Handicaps produced under these computation methods are one stroke higher than they would have been under the old Chicago District Golf Association system, but the handicaps at various levels will have the same relationships to each other as before, so the results produced by the new handicaps will be unchanged.

Basic Handicaps, on the other hand, will be somewhat lower under the new system than under the old USGA system, the reductions being larger at the higher-handicap levels than at the lower levels. For the most part, however, these reductions will be noticeable only in stroke-play events. Reductions in handicaps for stroke play have been made to correct the apparent over-handicapping of the higher-handicapped players who, in the past, have made net scores much lower than any scratch or low-handicapped player could hope to make.

In order to keep these lower handicaps at the same approximate levels for singles match play as those used so satisfactorily under the old USGA system, the higher-handicapped player is now granted the full difference between the handicaps of the two players as produced under the new chart, instead of being granted but 85 per cent of the difference produced under the old chart. This shift from 85 per cent of the difference to 100 per cent of the difference not only permits us to maintain approximately the same singles-match-play handicap levels while

reducing stroke play handicaps but it also makes handicap allowances for singles match play the same for both Basic and Current Handicaps, the Chicago District Golf Association having always granted the full difference in Current Handicaps in this type of play.

Handicap allowances in four-ball stroke play and match play under the revised system are different from those granted under either our old Basic system or the Chicago Current system. A change was necessary because the allowances under the two former systems were so far apart that proponents of either system could not have been expected to go from one extreme to the other. The new allowances are about halfway between the two extremes. In four-ball stroke play, each player is allowed 85 per cent of his individual handicap under the new system, as against 75 per cent under the old USGA system and 100 per cent under the Chicago system. In four-ball match play, the lowest-handicapped player plays from scratch, while the other players receive 85 per cent of the difference between their handicaps and that of the low man, as against 66 2/3 per cent of the difference under the old USGA system and 100 per cent of the difference under the Chicago system.

Use of the new 1953 USGA Golf Handicap System for Men may mean that some clubs and associations will have to alter their past methods and practices. However, all are urged to cooperate and give the new system a fair trial in the interests of uniform, nation-wide handicapping. Comments and criticisms of the new system will be welcomed by the USGA Handicap Committee. If sufficient evidence is furnished to prove that any of our recommendations are faulty, we will give our full attention to correcting the faults. In the meantime, let us all make 1953 the year in which the first real step towards true national handicapping is taken, so that in the not-too-distant future all golfers throughout the country will be handicapping under one, and only one, universal handicap system.

A Gourlay Ball for "Golf House"

Once upon a time there lived in Scotland golfers who played with a ball made of goose feathers sewed into a leather cover, although scarcely a man now living remembers the day. The feather ball was the first ball with which golf was played but it lost its charm about 1850 after a Rev. Dr. Robert Adams Paterson had created a ball of gutta percha.

During the four or more centuries when the feather ball was in play, all balls were made painstakingly by hand in the shops of the various professionals at golf courses throughout Scotland and England. There was, of course, considerable rivalry among the makers, and those who became preeminent could never supply the demand for their particular products.

The family of professionals and ball-makers who acquired the greatest fame was named Gourlay and operated at the Bruntsfield Links, in Edinburgh, and later at the Royal Musselburgh Golf Club, in Musselburgh. The patriarch of the family was Douglas, but he passed along his art to his sons, William and John. The Gourlay name was known throughout the British Isles by the middle of the eighteenth century, and "a Gourlay" became an accepted synonym for the best in golf balls. It achieved enduring fame in poetry and song.

When exhibits of balls and clubs of the feather-ball era were established in "Golf House," the void created by the absence of "a Gourlay" became conspicuous and we set about to fill it.

On the off-chance that Miss Molly Gourlay, of Camberley, Surrey, a member of the 1932 and 1934 British Curtis Cup Teams, might be able to give us a clue, we asked her if she knew of any that might be available.

It turned out that, despite her name, Miss Gourlay had never heard of a Gour-

THE BAD GOLFER WHO WAS GOOD

"I'm a golfer, St. Peter!" the spirit proclaimed,
"And of much I have done I am truly ashamed,
I have flubbed and I've dubbed to my pitiful cost,
But I blamed not the caddie whenever I lost."

"I've sliced and I've hooked and I've been in the rough,
Twenty years I've played golf, I've had trouble enough!

I've cursed when in sand traps, of that there's no doubt,
But I covered my foot prints before I went out."

"I'm a golfer, St. Peter! just one of the mutts!
My sins they are many, I've taken three putts
Count'less times when I shouldn't, my record is black,

But always the divots I cut, I put back!

"I'm an old hundred shooter! I thought I was great

Whenever I finished around ninety-eight;
I was slow at the game, I confess it to you,
But I never refused to let others go thru."

"Come in," said St. Peter, "come in and sit down!
"Come in and I'll give you a harp and a crown!
I've a welcome for you, with the saints you may dwell,

For it takes moral courage to play bad golf well."

"The Bad Golfer Who Was Good" is from the book THE HARBOR LIGHTS OF HOME, by Edgar A. Guest, copyright 1928, by The Reilly & Lee Co., Chicago.

lay ball, but the question piqued her curiosity and she took steps to determine just what "a Gourlay" was. Her quest took her to the Royal Musselburgh Golf Club, which has six highly prized and carefully safeguarded specimens.

William Currie, Captain of the Club, not only enlightened Miss Gourlay on the status of the balls but volunteered to donate one to the USGA Museum and Library.

The one presented to the USGA bears the name "Douglas" on one side and "Gourlay" on the other side. It appears to be unused, and a paper sticker attached bears the numbers 371/12. The significance of these numbers is not known.

There is no exhibit in "Golf House" which we cherish more than this little ball, at least 100 years old, which is not only a museum piece in itself but also expresses the friendliness which characterizes our golfing relations with Great Britain.

Meanwhile, the "Golf House" Fund has risen almost to the \$100,000 mark. At press time, 5,447 individuals, clubs, associations and others had given \$99,784.50. Of these totals, 114 have contributed \$1,670.01 since the last issue of the USGA JOURNAL. Their names are:

INDIVIDUALS

Ernest A. Arend, Jr.
G. H. Baber
Tom Baldwin
Sam Baronian
Bill and Russ Beaupre
Ralph V. Burdick, Jr.
Arthur F. Butler
William Catto
Jess G. Cook
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George L. Cornell
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Katharine M. Crocker and
Samuel B. Crocker
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Cherry Hills Country Club, Colo.
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New Orleans Country Club, La.
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Prairie Dunes Country Club, Kans.
Rammler Golf Club, Mich.
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Metropolitan Club Managers Association, Inc., N. Y.
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Oakmont and the Open

By PHIL GUNDELFINGER, JR.
GOLF WRITER, PITTSBURGH POST-GAZETTE

The Oakmont Country Club, 15 miles northeast of Pittsburgh, is entertaining the Open Championship this month for the third time, but there have been many changes in the eighteen years since the last Open there, in 1935.

Tommy Armour, the Scottish iron master, won the 1927 Open at Oakmont, beating Harry Cooper in a play-off, 76 to 79, after they had tied at 301, thirteen over par, for 72 holes.

Sam Parks, Jr., a Pittsburgh professional of 25, pulled a major surprise by winning the 1935 Open at Oakmont with a score of 299, eleven over par. Excellent putting on lightning-fast greens, plus a chip shot into the hole for an eagle, helped him to edge Jimmy Thomson, who was second with 301.

Oakmont is not so tough now as it was for the two previous Opens because there is more grass on the greens and there are not so many bunkers now. Where formerly there were 180 bunkers, now there are 158. However, the course now measures 6,916 yards.

The course was fairly easy for scoring in the 1951 PGA Championship. Sam Snead, the winner, and all the others could shoot for the pins with bravado because the course had been drenched with rain.

However, the comparatively easy first hole, a par 5 of 483 yards, the last 100 downhill, has since been lengthened ten yards by a new tee. It calls for a second shot with a long iron or short wood to a green which slopes away. The second hole also has been lengthened by more than 10 yards, to 355 yards, and the tee faces left across a big bunker, calling for a long carry to a narrow fairway with a ditch and heavy rough to the left.

The Pennsylvania Turnpike, which now bisects the course, has forced construc-

tion of a new green on the eighth hole, a difficult par 3. This 253-yarder has a more level green but it is nearly surrounded by bunkers.

The back nine is a stiff par 35 to offset the milder 37 going out.

The club is celebrating the fiftieth anniversary of its founding by the late William C. Fownes and a group from several other clubs in 1903. Mr. Fownes was president until his death in 1935, or 32 years. His son, the late W. C. Fownes, Jr., was president from then until 1946, and he died in 1950.

After the 1925 Amateur Championship, Oakmont recommended to the USGA that entertaining clubs provide all caddies for events henceforth, a policy which has since been in effect. Ten years later, at the 1935 Open, it started the practice of using an alarm to stop Championship play during a lightning storm.

For twenty years, from 1927 to 1947, the late Emil (Dutch) Loeffler served as both professional and greenkeeper at Oakmont. Loeffler shares with Pete O'Hara and Harry Cooper the competitive record of 68 for 18 holes, and he alone holds the 36-hole record of 141. The 72-hole record is the 294 scored by Willie Macfarlane in winning the 1934 Pennsylvania Open.

Bobby Loeffler, Emil's brother and longtime assistant, is now the greenkeeper and has absorbed much of his late brother's knowledge.

Oakmont and the nearby Pittsburgh Field Club are sharing the role of hosts in the Championship Qualifying Rounds on the two days prior to the Championship proper at Oakmont.

The entry for the sectional qualifying rounds was approximately 1,682, second only to the record of 1,688, established in 1952.

The USGA and the Colleges

The various sponsors of amateur sports use different yardsticks to measure amateurism. This point was brought out strikingly in the case involving a number of present and former students at North Texas State College, Denton, Texas.

These boys were to a degree victims of the differing views of amateurism held by the United States Golf Association and by some colleges. In accepting the routines of their college, the boys had engaged in practices which did not conform to the USGA Rules of Amateur Status.

Since the Rules of Amateur Status apply throughout one's life as a golfer, the Executive Committee, representing the 1,675 clubs which comprise the Association, wishes to cooperate with institutions charged with educating the young men of the country. However, the USGA will not compromise the Rules as they stand.

The North Texas State case is one in point. The USGA acquired evidence that some golfers there had been compensated by work scholarships for instructing classes in golf and/or had accepted expenses in connection with non-college competitions. The President of the College was notified of the divergence between these practices and the Rules of Amateur Status, and the golfers were notified that they had breached the Rules of Amateur Status.

The President promptly indicated his desire to revise the practices of the College so that no individual's amateur status in golf would be affected. Several of the boys soon thereafter filed applications which revealed that they had become aware of the Rules of Amateur Status and intended to conform to them. In view of this evidence of cooperation,

these particular boys were therefore reinstated immediately. The Rules permit an individual to be reinstated only once, so that if any of them should again breach the Rules, they would not be eligible for reinstatement.

The Executive Committee has noted assertions that there may be violations of the Rules at institutions other than North Texas State. If that is so and the Association obtains proof, the Rules will be applied.

Question has been raised as to whether the USGA can enforce the Rules uniformly without having a police force. The USGA is a voluntary association of golf clubs—a non-profit organization which seeks only to serve the good of golf. Long experience has proved that the best way to administer a gentleman's game such as golf is by the honor system. Honor is the soul of the golf code. You don't send out a detective or a policeman with every player. You accept a player's word as to his score, unless you have cause to believe that he may be falsifying, in which case you investigate.

The same code applies off the course in amateur status matters, just as much as in returning the right scores. If a player states that he is an amateur under the Rules, you take his word unless you have cause to believe otherwise, in which case you try to find out the facts.

Golf has thrived on this code of sportsmanship. In the long run, young players will be better off for developing their own self controls and a true sense of honesty than if they are obliged to do something only because of outside compulsion.

We feel that these principles were at the heart of the present case. We hope that the young men concerned may have learned something not only from the educational institution which they attend but also from the game to which they devote much interest. Perhaps golf has contributed something to their development as persons. We hope that it has.

The Women's Open

The Women's Open Championship, which will take place at the Country Club of Rochester, N. Y., June 25 through 27, is not a new championship, yet it will involve a series of "firsts."

The 72-hole stroke play competition will be the first conducted by the USGA, which assumed the responsibility at the request of the Ladies' Professional Golfers' Association.

It will be the first USGA women's championship to be "open" in the broad sense of the term—open not only to professionals but also to any amateurs handicapped at five or under. There is no club-membership requirement. Entries on official forms must, of course, be received at the USGA office no later than Monday, June 15.

It will also be the first playing for the permanent silver trophy provided by the USGA, in addition to the \$7,500 which will be distributed to the first twelve professionals, or more in the event of ties. The leading professional will receive \$2,000 and the leading amateur a gold pin.

The Club

This is also the Country Club of Rochester's first Championship of national scope, yet it is renowned as the Club where Walter Hagen first caddied and learned the professional's art. Hagen was professional there when he won his first Open Championship in 1914. The club was founded in 1895 by the men who introduced golf into Rochester, but it has been content with its invitation tournament for men, in the twenty-fifth playing of which last year Sam Urzetta retired the trophy, and with its invitation tournament for women, inaugurated in 1950 and won last year by Mrs. Reinert M. Torgerson.

There is an amplitude of experience in the Club's committee, however. The General Chairman is Otto A. Shults, who was General Chairman for the Oak Hill



Detroit News
Miss Louise Suggs
The Winner Last Year

Country Club during the Amateur Championship there in 1949. His co-chairman is Dr. George M. Trainor, who has won the Club championship the last three years and has played in many Amateur Championships.

Previous Women's Opens

The first Women's Open Championship, a match-play competition, was held at the Spokane Country Club, Spokane, Wash., in 1946 and was conducted by the Women's PGA and the Spokane Round Table. Miss Patty Berg, representing Minneapolis, won the qualifying medal, with a 73-72—145, and defeated Miss Betty Jameson, of San Antonio, Texas, 5 and 4, in the final. The purse

was an out-sized \$19,700, and Miss Berg carried away \$5,600 in bonds.

Miss Jameson came back to win the second Championship, at the Starmount Forest Country Club, Greensboro, N. C., in 1947. The form was changed to stroke play, and she made a 72-hole score of 295. Two amateurs, the Misses Polly Riley and Sally Sessions, tied for second at 301, and Miss Sessions won the play-off by making a 4 to Miss Riley's 5 on the first extra hole.

Mrs. George Zaharias, playing from Ferndale, N. Y., won the first of her two Championships at the Atlantic City

Country Club, Northfield, N. J., in 1948. She scored an even 300 in bad weather and led Miss Elizabeth Hicks by eight strokes. The purse was \$7,500. Miss Grace Lenczyk, of Newington, Conn., with a score of 313, finished in a tie for fourth and was the leading amateur.

Miss Louise Suggs, of Carrollton, Ga., succeeded Mrs. Zaharias at the Prince Georges Golf and Country Club, Landover, Md., in 1949, as a second organization, the Ladies' PGA, assumed responsibility for the competition. Miss Suggs started with a 69 and completed a record score of 291, which gave her a fourteen-stroke advantage over Mrs. Zaharias, the runner-up. The purse was \$7,500. Miss Carol Diringer, of Tiffin, Ohio, finished third at 306 and won the amateur award.

Mrs. Zaharias came back to win her second Championship at the Rolling Hills Country Club, Wichita, Kansas, in 1950. In the process she matched Miss Suggs' record of 291. The runner-up was an amateur, Miss Betsy Rawls, of Austin, Texas, who scored 300. The purse was \$5,000.

Miss Rawls turned professional before the next Championship and succeeded Mrs. Zaharias by scoring 293 at the Druid Hills Golf Club, Atlanta, Ga., in 1951. Miss Suggs was second, with 298. The purse was \$7,500. Miss Pat Lesser, of Seattle, scored 300, finished in a tie for fourth and was the best amateur.

Miss Suggs won her second Championship with a record-breaking 70-69-70-75—284 at the Bala Golf Club, Philadelphia, Pa., in 1952. As far as is known, her score is the lowest ever made by a woman over 72 holes in a major competition. The Misses Marlene Bauer and Betty Jameson tied for second at 291. In the second round, Miss Marilyn Smith made a single-round record of 67, and Miss Bauer matched this in the third round. The purse was \$7,500. Mrs. Mark Porter, of Philadelphia, was the leading amateur, finishing tenth with a score of 300. The course measured only 5,460 yards, and par was 69.

NEW MEMBERS OF THE USGA

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 Brookside Country Club, Ohio
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 Richardson Golf Course, Fla.
 Shady Acres Golf Course, Ohio
 Sunnybrook Golf Club, Mich.

Landscaping a Golf Course

By JOHN R. WILLIAMS, M.D.

OAK HILL COUNTRY CLUB, ROCHESTER, N. Y.

In the building of a country club, the cost of erecting buildings and constructing fairways, greens and tees as a rule far exceeds available funds. Hence little or nothing is budgeted for landscaping.

To beautify a fine residence with spacious grounds, architects budget from 15 to 20 per cent of the cost of the building. Since club houses are usually pretentious structures, budgetary limitations invariably limit such expenditures to the immediate club house grounds.

Landscaping of the golf holes, therefore, becomes a longed-for but seldom-realized desire, and many of the fine old courses on this continent are lacking in natural beauty.

Cost Can Be Low

When a golfer steps onto a tee to drive, he takes a long look down the fairway. A swamp, ravine or creek arouses a sense of caution and tension. A beautiful tree or a collection of them properly placed excites admiration. The reaction is likely to be relaxation and appreciation.

Beautiful fairways on inland courses are essentially avenues bordered by beautiful trees. The golfer's drive envisages a distance of 200 yards or more. Objects such as flower beds and shrubs are too small to have significance. They even may be distracting. Trees, larger, the more graceful, the supreme plant in nature, catch the eye. Bunkers bordering a fairway are ugly scars on carpet of green.

The distressing picture described above confronted the Oak Hill Country Club twenty-six years ago. We had a beautiful Tudor Gothic club house in the middle of 350 acres of abandoned, weed-infested farm land. Here and there were a few fence-line trees. Light, sandy top soil blew away with every passing breeze. Clay

was about as pervious as a concrete pavement. The growth of grass presented an exceedingly difficult problem. To add to the desolation, there was a staggering debt.

Yet, in spite of these handicaps, Oak Hill has developed unsurpassed fairways, and the landscaping on its two eighteen-hole courses has given it world-wide distinction. To achieve this has required twenty-six years of time but little capital expense to the club.

The landscaping program usually begins around the tees, later around the greens and lastly along the fairways. Each of these areas calls for special consideration.

At the outset every club should establish a tree nursery for which one or two acres of well-drained, good soil is required. About three fourths of this should be stocked with seedling evergreens and hard woods, which may be purchased at low cost from tree growing nurseries or from the State. Another portion should be set aside for the planting of tree seeds, such as oaks, hard maples, beech and ash. These can be gathered each fall from specimen trees in local parks.

Another of the first and most important steps is to form a liaison with a nearby state agricultural school, a university forestry school, or a state conservation commission—all three, if possible. Their advice and assistance will be found most helpful. Oak Hill has been extremely benefited in this way. Trees which may be useful and ornamental in residence landscaping may be valueless or detrimental on a golf course.

About the Tees

The planting about a tee should be attractive, restful and protective against the

elements. One or two deciduous trees, so located as to afford shade on the tee in hot midsummer, is desirable. Before purchases are made, one should be thoroughly familiar with the thermal zones of the United States. These are broad bands 200 miles, more or less, in width and extending irregularly across the country; the minimum range of cold is approximately the same throughout the thermal zone. Good nursery stock is usually listed in relation to the thermal zone in which it will thrive best. Native material, of course, meets this condition. Therefore, in the selection of evergreens, those indigenous to the locality will prove ultimately to be the most satisfactory. In the northeastern United States, the spruces, particularly the white, are attractive, as is the native hemlock and the European larch. Native red and white pines grow luxuriantly. Foreign evergreens, such as the western spruces and pines and the European conifers, should be used sparingly. They are shorter lived and more prone to disease. They look well for twenty to thirty years, then tend to disintegrate. Oaks, red, white and pin, are the trees of choice for planting around both tees and greens because they retain their leaves in the fall long after the close of the golf season.

As a beginning, six evergreens, three to four feet in height, and two oak saplings, five to six feet in height, may be purchased for \$2 or \$3 each, a total of not more than \$25. With proper care, such as watering and mulching, evergreens will grow from two to four feet and oaks from twelve to eighteen inches or more a year, so that in ten years this base planting will present sizeable proportions. An oak thirty years from the acorn stage will develop into a twenty-five to thirty foot tree. Oaks, contrary to the common notion, grow quite as rapidly as elms. Elms, soft maples, poplars and walnut trees have no place near the playing areas of a golf course. They are too fragile and their early falling twig, fruit and foliage habits present a

labor problem and are an interminable nuisance to golfers.

Around the Greens

The landscaping of greens differs from that of the tees. The golfer reaches the green, as a rule, after a comparatively long shot. Bunkers afford adequate penalties for misplays as well as opportunities for the exercise of golfing skill. Evergreens planted about a green are unfair hazards, particularly if they are allowed to grow naturally with the lower whorls touching the ground. An evergreen with its lower branches cut off is a monstrosity. The trees about a green should be oaks, pin, red or white. By using these, the leaf and twig problem in the fall is avoided. Hard maples may be used at a slightly greater distance from the green, but elms, soft maples and flowering fruit trees should be shunned.

A fair-sized green should have about four trees at such distance from its boundaries as to avoid excessive shade and protruding root growth. Young, deciduous trees should be protected against mower injury by stakes or other trunk guards.

Along Fairways

One of the greatest mistakes would be to attempt to adapt an old apple orchard to golf-course landscaping. Old apple trees are a perpetual nuisance, a constant source of insect infestations. They present a maintenance effort, and expense, throughout the golfing season that could better be devoted to more useful trees.

Plantings along fairways may consist of clumps, or plantations, of evergreens or deciduous trees, but they should be so located as to avoid both undue golfing hazards and the fall leaf problem. Trees bordering the fairway should preferably be oaks. Willows have their special place along creeks and on the banks of ponds, and for this the Wisconsin willow is advised. Birches, beeches and mountain ash, too, have their place in selected locations. A golf hole lined with mountain ash,

*Paul W. Davis*

This beautiful avenue of beautiful trees is the seventeenth hole on the West course at the Oak Hill Country Club. It is a par 3 and measures 158 yards.

backed by hemlocks or white spruce, presents a gorgeous sight in the fall.

An eighteen-hole golf course of upwards of eighty-five acres requires for its base planting about 2,000 young trees. Large expanses of unused rough serve excellently as tree plantations which ultimately may become small, park-like areas. The perimeter of a golf course is best forested with evergreens; white spruce, red pine and hemlock are ideal. The trees should be staggered roughly twenty to thirty feet apart. A multiflora rose hedge, planted about three feet from the property line, makes a beautiful, inexpensive and impenetrable fence serving to keep out trespassers, dogs and cats. At the same time it provides a shelter and a source of winter food for game birds and small animals.

Evergreens not only serve to screen out adjoining residential districts but they are invaluable as insulators of noise and as windbreaks. It is not generally appreciated that long open fairways serve as excellent beds for surface

air currents or wind rivers. They tend both to dry the turf and to cause wind erosion. This is particularly true on hilly and sandy courses, and for a few years it was a problem at Oak Hill. The remedy is skillful planting of evergreens.

The Nursery

Thus far, only preliminary, or basic, landscaping has been discussed. The cost of the material should not be more than \$5,000 and could be much less if a large part of it were seedling stock. If possible, the seedling stock should be purchased the first year, installed in the nursery and planted in permanent locations as conditions permit. This can be done by the grounds crew in the late fall and early spring, before fairways need major attention. With a limited labor force and funds, it may take five years or more to complete this base planting. Meanwhile, the young stock in the nursery is growing and uniformity in size is maintained. Each year thereafter seedling or sapling stock of rare or specimen trees

should be purchased and installed in the nursery. These can be secured in lots of ten, twenty-five or one hundred at low cost. European larches, the various western blue spruces, the gum trees, tulip, Kentucky coffee, Chinese scholar, Russian olive, the gingko, rare oaks, the dogwoods and flowering crabs are recommended. With the nursery thus stocked, the landscaper can look forward to many years of progressive beautification at little further cost for materials.

When buying nursery stock, do not rely solely upon nursery catalogue pictures. Visit a good park or arboretum and see a full-grown, mature specimen. Wonderful color effects can be produced in the fall by various combinations of trees with colored foliage. This is especially true where hillsides are available for mass grouping. One of the wisest steps a landscaping committee could take would be to visit some of the well-known arboreta and parks, such as the Arnold Arboretum, in Boston, and the Highland or Durand-Eastman Parks in Rochester. The latter, with a hilly terrain, has a public golf course and some of the most beautiful landscaping effects in the world. A visit to the Oak Hill Country Club would reveal what can be achieved at little expense to the club.

Financing

The question may arise: How does a club with a staggering overhead and debt finance such a program?

The first requisite is a chairman with missionary zeal and a love of nature. Previous knowledge or training is not necessary. That can readily be acquired and is a richly rewarding experience.

Next, there should be a small committee of enthusiastic backers. By various persuasive methods, members of the club should be approached to supply the material for a given project. It can be pointed out, for example, that for as little as \$20 the basic planting of a tee or green could be begun.

A project which received vigorous support at Oak Hill was the naming of trees

honoring members for distinguished service to the Club and those who had lost their lives in the service of our country. Many trees now honor members who have loyally supported the club for fifteen years or more. Indeed this is a prized feature.

Special trees have been reserved for persons who have rendered distinguished service to golf. One beautiful pin oak honors Francis Ouimet. Another honors Charles Coe, who won the Amateur Championship at Oak Hill in 1949. The members of the British Walker Cup Team who played in that Championship were so impressed with the dignity of the ceremony honoring Coe that they expressed the wish that their visit might be similarly commemorated. This was done later in the year in an impressive ceremony to which the then British Ambassador, Sir Oliver Franks, sent a representative.

In all, there are now 250 memorial trees. A simple, inexpensive tablet of masonite bearing the name of the tree and the person honored is attached. The recipient or his friends may replace this with a suitable bronze plaque.

The sentimental, esthetic and financial value of the memorial trees to Oak Hill cannot be overestimated. It has promoted a lively interest in the natural beauty of the club because each person honored feels that he is an integral part of the landscaping. This activity has proved a fruitful source of income to our landscaping budget. Donations of \$50 to \$100 are not uncommon.

Nothing a club can do will contribute more to its security and permanence than beautifully landscaped grounds. It has been estimated that it has added more than a million dollars to the value of Oak Hill property. Furthermore, because of it, the building developments which are gradually surrounding the club have already increased the taxable values of these properties by at least a million and a half dollars. A fine country club is a real community asset and stimulus to suburban growth.



THE REFEREE

Decisions by the
Rules of Golf Committees

Example of symbols: "USGA" indicates decision by the United States Golf Association. "R & A" indicates decision by the Royal and Ancient Golf Club of St. Andrews, Scotland. "53-1" means the first decision issued in 1953. "R. 37-7" refers to Section 7 of Rule 37 in the 1953 Rules of Golf.

Breaking Obstruction

USGA 53-3

D. 20; R. 17-3, 31-2

Q: A player's ball rolled in a tree basin of a young tree, which was held up by a large stake, or board. It so happened that the stake, but not the tree, interfered with the stroke. It was decided that, since the stake had been placed there by the green committee for course upkeep purposes, it was a movable obstruction and could be moved. In attempting to move it, however, the player found it was so solidly embedded it would not come out, so he broke it off. How would you interpret the Rules in this situation?

Question by: BRIG. GEN. S. E. RIDDERHOF
NEWPORT BEACH, CAL.

A: The player had no right deliberately to break the stake supporting the tree. In doing so, he violated Rule 17-3, which provides in part that "A player shall not improve, or allow to be improved, his line of play or the position or lie of his ball by moving, bending or breaking anything fixed or growing", with certain exceptions not pertinent to this case. The penalty is loss of hole in match play or two strokes in stroke play for the deliberate action of breaking an immovable obstruction. However, if such an obstruction were broken accidentally, we would be inclined to take a more lenient view.

The stake was an immovable obstruction

(Definition 20). If the player's ball touched it or if it were within two club-lengths of his ball and interfered with his stance or stroke or the backward movement of his club for the stroke, he could have lifted without penalty and, through the green or in a hazard, dropped not more than two club-lengths from the stake, not nearer the hole, as provided in Rule 31-2.

Lateral Water Hazards

USGA 53-4

D. 14b, c, d; R. 33-3

Q1: A lateral water hazard is on the right of the fairway. Player's second shot settles in the ditch but not in the water. The ball is practically unplayable, being on the opposite side of the water in a position where the club would have to dig through the bank of the ditch in order to reach the ball, and the ball would have to attain a very quick loft to clear the bank on the other side of the water. We have no markings as to where the water hazard starts or ends but there is plenty of water in the hazard.

If the player does not want to play the ball where it is, what is the proper procedure? Is it an unplayable ball or is it a ball in a lateral water hazard?

A1: If the water hazard was in fact a lateral water hazard, the player could have proceeded under either of the two options in Rule 33-3. A ditch is a water hazard (see Def. 14b). It should be emphasized

that the committee, in advance of play, should have defined accurately the type and extent of the hazards, as directed in Definition 14c and d. When that is not done, inconsistencies and unfairness can result.

Q2: In the Tampa Women's Open, Miss Betty Dodd hit a tee shot on the thirteenth hole that ran through the trap to the left of the green and went into a lateral water hazard. The ball crossed the margin of the hazard hole high.

The question was raised as to where the ball should be dropped. The ditch is about six feet wide and near where the ball went in is a bridge going to the other side. I ruled that the ball should be dropped on the opposite side of the ditch because to drop on the green side of the ditch would be a drop closer the hole. Was I correct?

A2: If the water hazard was a lateral water hazard, your decision was right provided it was impossible for the player to drop her ball on the green side (under Rule 33-3) without having it come to rest nearer the hole.

However, it is usually possible to conform with the Rule by dropping the ball within an arc of two club-lengths from the point where the ball last crossed the hazard margin.

From the description, it appears that the section of the hazard concerned was not a lateral water hazard (Def. 14c).

Questions by : CHARLES F. BAILEY
TAMPA, FLA.

Defending Champion in Draw

USGA 53-5
R. 36-1

Q: Should a defending champion be forced to qualify in an inter-city tournament? There are four clubs represented. This question has also been raised in regard to the Washington State tournament, inter-sectional tournaments and private club tournaments.

Question by: MRS. FRED C. RUMMEL
SPOKANE, WASH.

A: There is no pertinent Rule. The matter is up to the committee in charge (see Rule 36-1), and the committee should announce its decision in advance.

In a USGA Championship which has a qualifying round as a part of the Championship proper, the last previous winner

is not exempt from qualifying, as the event is a test of current ability.

If a defending champion who is exempt from qualifying elects to compete for a prize in the qualifying round, equity would seem to require that he forfeit his automatic qualification and compete on the same basis as all other competitors in that round.

Touching Soil in Bunker

USGA 53-6
D. 14a, 33-1

Q: While playing from a bunker on our course, a player permitted his club to touch a bare spot behind his ball and on his backswing. A penalty was immediately called on him, but in his discussions since he has placed his claim to immunity on the wording of Rule 33-lb. This paragraph says the player may touch any 'wall' of a hazard on his backstroke without penalty. The question becomes: what is a wall of a hazard? The bare spot touched by the player's club was a solid wall of clay at an angle of 45 degrees, not covered with sand although admittedly within the confines of the hazard.

Question by: HARRY WINTERS
INGLEWOOD COUNTRY CLUB
INGLEWOOD, CAL.

A: The player touched the ground in a hazard with his club in violation of Rule 33-1 and thereby lost the hole in match play or incurred a penalty of two strokes in stroke play.

Rule 33-lb does not apply; an embankment of exposed soil is not a "wall, paling or other fixed object" within the meaning of that Rule. Definition 14a provides in part: "A bunker is that part of a depression in the ground where the soil is exposed . . ."

Local Rule May Cover Retaining Wall of Gravel Path

USGA 53-9
D. 20; R. 29-2; LR

Q: We have a man-made path running from No. 1 tee down left side of fairway some 100 yards. The fairway slopes from left to right. The path is gravel and due to the slope a 1" x 6" board acting as a retaining wall has been built to hold in the gravel.

If a ball comes to rest in the path it must be played or an unplayable-lie penalty taken. But what is the ruling if the

ball comes to rest in the fairway but so close to the board that it cannot be played?

Question by: C. T. ROTHWEILER
SAN ANSELMO, CAL.

A: The ball must be deemed unplayable and the player must proceed in accordance with Rule 29-2.

Definition 20 specifically provides that artificially constructed roads and paths are not obstructions, and retaining walls of the type to which you refer must be considered a part of the road or path. Therefore, relief is not available under Rule 31.

However, it is within the province of the local Committee to adopt a local rule providing that when a ball lies to the right of the retaining wall and is interfered with by it, the player may proceed under Rule 31-2 without penalty.

Fellow-Competitor and Flagstick

R & A 52-45
R. 34-lb

Q: A and B were playing in a medal competition, marking each other's cards. On a putting green A's ball lies some 35 feet from the hole. B walks over and stands near the flagstick. A does not request B to remove the flagstick. A addresses his ball and putts. It is a good putt, and the ball goes directly for the flagstick. B moves over and removes the flagstick. The ball does, in fact, run directly over the center of the hole and comes to rest some four feet beyond it. The point the committee (of which I am a member) had to decide was whether B was entitled to remove that flagstick.

The decision the committee came to was: "that, but for B's action, A's ball would have struck the flagstick and come to rest in a quite different position from that in which it did come to rest with a penalty to A two strokes. Therefore B's action must be held to have influenced the position or movement of the ball (Rule 35-1g). B, therefore, incurs the penalty of two strokes. In other words, in stroke play, if a competitor does not ask for the flagstick to be removed, no other person should move that flagstick until the ball has come to rest.

Question by: PHILIP M. HANMER
LIVERPOOL, ENGLAND

A: Rule 34-lb: In this case it must be assumed that A approved B attending the flagstick and tacitly agreed to B removing

this if there was any likelihood of his ball, when played, striking it. In the circumstances B's action was correct and no penalty attached to either player.

Danger from Lightning

R & A 52-80
R. 37-6a

Q: During a recent stroke competition there was a torrential downpour of rain and certain members considered lightning was imminent (having read the daily weather report that thunder was likely) and took shelter, which they thought was justified under Rule 37.

Others contend that the Rule reads "danger from lightning," not "danger of lightning". Therefore, despite the rain and the likelihood of a thunderstorm, players cannot consider there be danger from lightning until there is aural and visual evidence of thunder and lightning.

Question by: HAMPSTEAD GOLF CLUB
LONDON, ENGLAND

A: Under Rule 37-6a, the player is the sole judge as to whether or not there is danger from lightning, and no action can be taken by the committee in relation to a player relying on this Rule. While, in cases of real doubt, players should be given the benefit, a committee would be entitled to refuse a player entry to a competition if it was evident that his "judgment" was obviously unreliable.

Recording of Handicaps

Responsibility of Committee

R & A 53-6
R. 38-2b, 39-2c

Q1: In a Stableford competition the competitor's gross score is correctly recorded, i.e., 3. The bogey score for the hole is 3, but 3 points instead of 2 were claimed; the competitor was not entitled to a stroke at this hole. Should he have been disqualified?

A1: No. The competitor is only responsible that the gross number of strokes taken at each hole are correctly recorded on his score card (Rule 39-2c.) The Committee is responsible for the addition of scores and adjustment of handicaps.

Q2: Must a player record his handicap on his score card? Rule 37-4 and Rule 38-1 and 2 do not clarify this.

A2: No. The Committee are responsible. Rule 38-2b.

Questions by: NEW SOUTH WALES GOLF ASSN.
AUSTRALIA



Correspondence pertaining to turf management matters should be addressed to:
 USGA Green Section, Room 331, Administration Building, Plant Industry Station, Beltsville, Md.
 Western Office: Box 241, Davis, Cal.

BENTGRASS PUTTING GREENS AT CHATTANOOGA

By ALEX G. MCKAY

SUPERINTENDENT, CHATTANOOGA GOLF AND COUNTRY CLUB, TENN.

Golf-course superintendents as a rule are a placid group. The average superintendent is a quiet, industrious man with skin of tan who gives his all every day to provide golfers with the best possible playing conditions on a budget which is never quite enough. Yet within our group are some who, with mischievous twinkles in their eyes, sometimes succumb to the urge to turn friend against friend. This they do by initiating a discussion on the feasibility of bentgrass putting greens in the South.

We readily admit we have a gleam in our eye, but it is not directed toward inciting more discussion of the provocative question; we are merely proud of our bentgrass putting greens at the Chattanooga Golf and Country Club.

We rebuilt our eighteen putting greens in the fall of 1951. We used the Arlington (C-1) strain of creeping bentgrass on three greens and the Old Orchard (C-52) strain on the remaining fifteen greens. During the summer of 1952 we experienced a total of nineteen days with-

in a temperature range of 102°F. to 107°F. Ten of these days were consecutive. We also experienced some flash storms which, coupled with high temperatures, oftentimes mean death to grass.

Yet we had only minor troubles on three greens (a few dead spots), while all other greens came through the summer unmarred. Our members consider it a miracle, and, truthfully, it was more than I expected of any bentgrass during so unfavorable a summer. Since the greens fared so well in 1952 (which was the toughest grass year I have encountered in my thirty years experience), I am ever so much more optimistic about the future of bentgrass putting greens in the South.

Experience has taught me that good sub-surface drainage is one of the most important factors in keeping bentgrass putting greens. Sub-surface drainage is vital in times of excessive rainfall. If, during a season, this sub-surface drainage system is put to work only one time, I feel that the expense is justified. I sleep

much more comfortably just knowing that the drainage system is there to function if needed.

I use the herringbone system of tile drainage with tiles spaced not more than 15 feet apart and a fall of not less than one per cent. The tile is placed to a depth which measures 20 inches from the bottom of the ditch to the surface of the green. Between tile lines, I taper the sub-surface soil from the center to the drainage lines on either side to insure against pockets where water could lay and to direct the water into the tile system. Over the tile I place coarse gravel to cover the lines. Then, in spreading the topsoil, I place my boards on the peaks formed by my sub-surface grading.

In the areas directly over the tile lines there is a depth of topsoil of from 14 inches to 16 inches, while at the sub-surface peaks the depth of topsoil is approximately 10 inches. All topsoil is mixed off the green site and is hauled in by wheelbarrow. This phase of putting green construction is done carefully and exactly, as my experience has taught me that good sub-surface drainage is one of the most important factors in keeping bentgrass putting greens in the South.

As is true in most parts of the country, we have to build our greens to with-

stand the excessive heat of July and August, and all our efforts are directed toward seeing us through those trying months. Under our conditions, greens which are drained improperly will suffer during July and August.

Surface drainage is another important construction factor, and where it is possible to do so, I try to provide surface drainage in two or preferably three directions. It is important to remove the water from the surface of the green as well as from the sub-surface areas.

Bentgrass putting greens in the South must be checked carefully for signs of wilt during the hot summer months. During the torrid summer of 1952 we had to watch our greens very closely. On some days we worked until 6:30 P.M. to *hand syringe* the greens in order to keep the grass from wilting. We feel that the practice of light hand syringings, which supplement our usual early morning waterings, often-times means the difference between life and death of bentgrass.

The fertilizing program for my putting greens is as follows: In spring and fall I mix my fertilizer with topdressing and apply it uniformly over the greens. Topdressing consists of 50 per cent coarse, sharp sand, 35 per cent sterile loam soil, and 15 per cent peatmoss.



Alex G. McKay, the author, inspects the sub-surface drainage system while workmen haul topsoil. Mr. McKay uses the herringbone drainage pattern and believes whole-heartedly in sub-surface drainage for best results with bentgrass greens in the South.

The greens are fertilized three times in the spring and twice in the fall. I apply the equivalent of one pound of nitrogen (mostly organic nitrogen) each month during the spring and fall. These applications are supplemented with light rates of ammonium sulphate when I feel it necessary.

A good preventive fungicide program is important especially in the maintenance of bentgrass putting greens in our region. I prefer to take preventive measures as I feel that anything that I can do to prevent spore formation will be of decided value in combating diseases.

The members at the Chattanooga Golf and Country Club are well pleased with the bentgrass putting surfaces. Since the bentgrass greens have been open for play, we have had an increase in membership

and guest players at Chattanooga. Now that our members have tasted bentgrass putting surfaces, they vow that they will never go back to bermuda-ryegrass putting-green turf at Chattanooga.

EDITORS' NOTE: *Mr. McKay has been a golf professional, golf course architect, consultant and golf-course superintendent for thirty years. In that time he has built 120 bentgrass putting greens in the South. Ten of these years were devoted to work in Louisville, Ky., where he designed and built the Shawnee Country Club, rebuilt the Cherokee Country Club, the Crescent Hill Country Club, the Audubon Country Club and the L. & N. courses. He then moved to Charleston, W. Va., where he designed and built the Meadow Brook Golf Course and rebuilt the greens at the Edgewood Country Club. Later he moved to Knoxville, Tenn., and worked on the greens at the Holston Hills Country Club, rebuilt the greens at the Cherokee Country Club, and rebuilt the greens at the Chattanooga Golf and Country Club, where he is now employed.*

CHINCH BUG CONTROL

By JOHN C. SCHREAD

ASSOCIATE ENTOMOLOGIST, CONNECTICUT AGRICULTURAL EXPERIMENT STATION, NEW HAVEN, CONN.

There is perhaps no other insect of national distribution which is more injurious to turf than the hairy chinch bug (*Blissus leucopterus say.*)

The insect is apparently native to tropical America. It has migrated northward up the Atlantic Coast, the Mississippi Valley and the Pacific Coast and is now found everywhere south of the St. Lawrence River and the Great Lakes. It also extends into the Dakotas, southern Canada and the eastern slope of the Rocky Mountains to Texas. Reports of its presence in areas of the Pacific Coast states are current.

Altitude up to 3,000 feet appears to be no barrier to its survival. When surface temperatures range between 75° F. and 80° F. the insects may, when present, be observed and collected. This insect, obviously of tropical origin, appears to survive the winter as adults only in some areas. There are reports, however, of successful overwintering of immature indi-

viduals during mild seasons in the Northeast.

Winter is passed in protected places, such as under quantities of fallen leaves, in piles of discarded plant material, fence rows, tufts of heavy grass and in dense thatch which has been accumulating in well-kept turf areas for a few or a number of years.

In the spring, in most years, the bugs leave their winter quarters when the temperature is about 70° F., which for the most part may not occur until May. This year, however, in Connecticut an exception to the rule developed.

Investigations of a report of serious and undetermined injury to turf on an athletic field in the vicinity of New Ha-

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ven during early April revealed the presence of hordes of adult chinch bugs damaging the current season's growth.

Eggs for the first of the season's several broods are laid by the hundreds on the ground at the base of the grass plants or on the roots just below the surface, the process continuing for about a month. After a week or two the eggs hatch into small, very active bugs, reddish or yellow with orange tinge, with a band of white on the back just behind the wing pads. They become dark as they grow older and on reaching the adult stage acquire full-sized wings.

Chinch bugs in all stages are dependent for their food supply on the sap of growing grass plants. Consequently, during dry years they may multiply and spread rapidly enough to become a major pest of turf in golf courses, parks, home lawns, cemeteries, athletic fields and so forth. Irregular, reddish-brown areas begin to appear and multiply until the entire turf area may become involved in infestation. By autumn almost all of the grass area may have been killed, leaving only crabgrass, weeds and clover which appear to be less desirable food plants. Sun-drenched turf in protected places may be more seriously injured than grass in semi-shade.

Chinch bugs are particularly affected by weather conditions, dry weather being favorable and wet weather unfavorable. Dry weather appears to induce migration, and a succession of several dry years favors a large increase in numbers and consequently in injury. They frequently injure bentgrass and young bluegrass, as well as old stands of bluegrass and fescue, before their presence is realized. Wet weather in early summer, when the young chinch bugs are developing, may reduce their numbers.

The presence of the insect may be detected by examining the grass at the surface of the ground. The small ($1/5$ inch to $1/6$ inch in length) black, fast-moving adults, with white wings, will be seen scurrying about in an effort to conceal

themselves. The smaller, immature stages may be seen wherever the infestation is severe.

Control of the chinch bug in the past was undertaken in several ways. Eight years ago DDT was shown to be effective for the purpose. It would appear, however, that both Dinitro-o-cresol and Sabadilla are faster acting and more efficient. Rather heavy applications of DDT dust were required, and adult chinch bugs seemed to be more susceptible to the insecticide than the nymphs. Finely ground tobacco dust with a nicotine content of not less than one per cent, or derris or cube dust containing 0.5 per cent to 1.0 per cent rotenone was used with varying degrees of success. Several



Conn. Agricultural Experiment Station photo

Short and long winged chinch bug adults (*Blissus leucopterus say*) enlarged approximately sixteen times.

of these materials had the disadvantage of washing off easily with rain, and repeat treatments were often necessary. Some of the newer insecticides, such as Chlordane, Aldrin, Dieldrin and DDT, do not have this drawback and will give excellent control of chinch bug.

When the grass is kept closely clipped, injury by chinch bug may not be too severe. However, in the event damage begins to develop, one of the chlorinated hydrocarbon insecticides mentioned previously (Chlordane, Aldrin, Dieldrin or DDT) should be employed to destroy the population. No matter which material is

used, the grass should be cut short before application.

Chlordane

Chlordane applied to an infested turf as a 5 per cent dust at the rate of 5 pounds to each 1,000 square feet or as 48 per cent emulsion applied at the rate of 6 ounces in 1.5 gallons of water to each 1,000 square feet, will destroy both adult and immature bugs within twenty-four hours or less. Its residual action in preventing reinfestation assures complete protection for at least from two to three months. Since chinch bugs become active in late spring and early summer, a treatment applied on July 1 will give protection for the rest of the season.

Aldrin and Dieldrin may be used as 2.5 per cent dusts at the rate of 5 pounds to 1,000 square feet or as 25 per cent emulsions, applied to infested turf at the rate of 4 ounces in 1.5 gallons of water to 1,000 square feet.

DDT

DDT will not destroy chinch bugs nearly so fast and completely as will Chlordane. In many instances the status of a treated population appears to be virtually the same twenty-four hours after treatment as before. As the infestation gradually declines, many adults apparently remain normally active for days. Actually, from one to two weeks are required in midsummer for complete mortality of the population, and reinfestation begins to appear in about seven to eight weeks subsequent to treatment. For best results, DDT may be applied to an infested turf as a 10 per cent dust at the rate of 5 pounds to 6 pounds to 1,000 square feet.

Methods of Application

Any of the insecticides mentioned above may be applied as taken from the package or they may be combined with sand or fertilizer as a diluent, thus providing a greater bulk of material to

achieve a more even and thorough distribution.

When large turf areas, such as golf-course fairways, are to be treated, a mobile hydraulic sprayer, having a tank capacity of 50 gallons or more, may be used. To each 50 gallons of water an emulsion of either Chlordane, Aldrin or Dieldrin or DDT should be added so as to obtain 8 pounds to 10 pounds of technical insecticide to 50 gallons of water to the acre. A spray boom consisting of a series of nozzles (10 or more), spaced 18 inches apart, should be fastened to the rear of the spray truck at a height of about 30 inches from the ground and connected with the sprayer.

When the spray nozzles with fine orifices are used on a boom at 18-inch intervals and the rate at which the sprayer is drawn over the ground is carefully to 50 gallons of finished spray material should be sufficient to treat one acre of chinch bug infested turf.

COMING EVENTS

- May 18-19 Turf Conference, Southern Turf Association, Chickasaw Country Club, Memphis, Tenn. J. E. Hamner, Superintendent, Memphis Country Club, Memphis, Tenn., general chairman.
- June 8: Turf Field Day, Central Plains Turf Foundation, Wichita, Kan.
- August 3: Field Day Purdue University, West Lafayette, Ind. W. H. Daniel.
- August 10: Field Day, Texas Turf Association, City Auditorium, Wichita Falls, Texas. A. B. La Gasse, Director of Parks and Recreation, Wichita Falls, Texas, in charge.
- August 11: Field Day, Rutgers University, New Brunswick, N. J. Ralph E. Engel.
- August 19-20: 22nd Annual Greenkeepers Turf Field Days, University of Rhode Island, Kingston, R. I. J. A. De France.
- September 8-9: Turf Field Day, Pennsylvania State College, State College, Pa. H. B. Musser. (Field day starts at noon September 8 and ends at noon September 9.)
- October 21-22: 4th Annual Central Plains Turf Foundation Turf Conference, Manhattan, Kan. William F. Pickett.
- November 16-20: American Society of Agronomy Meetings, Dallas, Texas, L. G. Monthey.

TIFFINE (TIFTON 127) TURF BERMUDAGRASS

By B. P. ROBINSON and GLENN W. BURTON

Turf Specialist and Principal Geneticist, respectively, Georgia Coastal Plain Experiment Station and U. S. Department of Agriculture, Georgia Coastal Plain Experiment Station, Tifton, Ga.

Golf-course superintendents continually search for a good, fine-textured bermudagrass. The establishment of experimental turf plots at the Georgia Coastal Plain Experiment Station, Tifton, Ga., in 1947 marked the first milestone for the selection, breeding and testing of bermudagrass types for turf purposes. During that time more than 136 types of bermudagrass were tested under both golf green and fairway management.

By 1949 and 1950 it was evident that a hybrid bermuda, Tiflawn (Tifton 57 bermudagrass), produced at the Experiment Station, was superior to common-seeded bermudagrass and several selections from golf courses in the Southeast. Tiflawn, however, still fell short of the exacting requirements of the golfers for a very fine-textured bermuda.

In an effort, therefore, to produce a finer-textured bermuda, while still retaining desirable qualities, Tiflawn, *Cynodon dactylon* and several other selections of common bermuda were hybridized with a very fine-leaved, disease-susceptible bermuda from South Africa, namely *Cynodon transvaalensis*.

Eighty-nine hybrid plants, obtained from crosses, were planted in the field for observation in 1949. Several of the plants appeared to be inferior turf types and were discarded. The most promising

hybrids, however, were planted in the experimental turf plots. Such comparative ratings as disease resistance, sod density, fineness, playing quality, weed resistance, aggressiveness and so forth over the last two years have indicated that the hybrid plant carrying the number 127 is a superior turf type. This bermuda, produced by crossing Tiflawn with South African bermudagrass, has become known as Tifton 127 turf bermuda, or Tiffine. Since it does not produce viable seed, Tiffine must be propagated vegetatively.

Tiffine has a distinctive medium-green color, is aggressive, disease resistant, not injured by overseeding with ryegrass and much finer in texture than Tiflawn, common-seeded bermuda or most other types of bermudagrass used on putting greens. Although small quantities of sprigs have been mailed to many clubs in the Southeast, a limited supply still is available to clubs on request. Sprigs from commercial sources are available also. Observations to date indicate that Tiffine is well adapted throughout the Southeast. It is being grown satisfactorily on new greens in the coastal area and as far north as the Ohio River Valley.

Although Tiffine is a great improvement over common bermudagrass for putting greens, the bermudagrass breeding work is being continued with the hope that even better bermudagrasses may be found.

WHAT ABOUT MALEIC HYDRAZIDE?

By ALEXANDER M. RADKO

ACTING EASTERN DIRECTOR, USGA GREEN SECTION

Recently we received several inquiries from clubs requesting information on the use of maleic hydrazide as a grass-growth retardant. This surge of inquiries is due undoubtedly to the recent adver-

tisements suggesting maleic hydrazide as a substitute for mowing. Few letters were received from golf-course superintendents, which we interpret as a sign of progress because it indicates that the superinten-

dent fast is becoming educated to the fact that in golf-course management and maintenance there is no panacea which is all inclusive, as some of the recent sensational forms of advertisements would have us believe.

Is maleic hydrazide application to turf a substitute for mowing? Let us look at the facts. Maleic hydrazide has had limited testing to date. Results from agricultural experiment stations agree generally that there is a possibility for limited use on rougher turf areas where the use of mowing equipment is difficult or impractical, but on specialized turf areas, including lawns, it appears that much more research work should be done before any blanket recommendations can be made.

Evidence to date indicates that maleic hydrazide reacts differently on different grasses. It appears also that height of cut is an important consideration in the use of this material. While there are favorable reports on the use of maleic hydrazide on roadside and highway turf, that does not mean necessarily that those results are applicable to closely cropped, special-purpose turf such as putting greens, tees and fairway areas.

From the Bureau of Plant Industry, United States Department of Agriculture, Physiologist Dr. Paul C. Marth states: "On the basis of results, the use of ma-

TURF MANAGEMENT

Worth-while discussions of the problems confronting Green Committee Chairmen are contained in **TURF MANAGEMENT**, a book sponsored by the United States Golf Association. This volume was edited by H. Burton Musser and published by the McGraw-Hill Book Co., Inc.

It is available through the USGA, 40 East 38th Street, New York 16, N. Y.; the USGA Green Section, Room 331, Administration Building, Plant Industry Station, Beltsville, Md., and bookstores generally. The price is \$7.

leic hydrazide for suppressing growth of lawns in the vicinity of Washington, D. C., seems questionable . . .

"A Kentucky bluegrass sod that was sprayed with the diethanolamine salt formulation of maleic hydrazide at spray concentrations of from 0.5 to 2.0 per cent on May 11, 1950 developed an objectionable browning and was stunted severely in growth for several weeks. Crabgrass invaded and developed more in the sprayed than in comparable unsprayed plots.

"*Zoysia japonica*, when sprayed on June 5 with maleic hydrazide at 0.5 per cent developed a yellow-green color but slowly recovered during a two-months' period thereafter. At 1.0 per cent and 2.0 per cent spray application, some of the *Zoysia* was killed and the remainder was off-color throughout the rest of the growing season."

Dr. Marth cites the following table:

Effect of maleic hydrazide treatment on the invasion of Kentucky bluegrass sod by crabgrass. Data based on fresh clipping weights made on July 31, 1950 on sod that had been sprayed on May 11, clipped on May 23, and again on June 6, 1950, at Beltsville, Md.

Maleic hydrazide spray concentration (per cent)	lb/A**	Total fresh weight (gm.) of clippings (average of 4 plots)	Per cent *crabgrass in clippings (average of 4 plots)
0	0	1150	10.7
0.5	1.4	1925	23.0
1.0	2.8	2250	28.7
2.0	5.6	2325	46.2

* The crabgrass was hand sorted and weighed for each plot.

** Pounds per acre of maleic hydrazide.

Note that with an increase in rate of application of maleic hydrazide there was an *increase* in the amount of fresh clip-

pings removed. This increase in weight was due in considerable part to the heavy infestation of crabgrass. In every case

the amount of clippings approximately doubled on treated plots as compared with the untreated plots.

From the Oregon State College, Dr. Virgil H. Freed reports these findings:

Material	Rate/acre	June 21, 1950, weights	July 5, 1950, weights	Color rating
Maleic	2#	635.5	55.0	Very poor
Hydrazide	2#	410.5	67.5	Poor
	2#	291.8	47.1	Poor
	4#	442.0	42.5	Very poor
	4#	489.0	59.8	Very poor
	4#	304.0	65.0	Very poor

"From the table it can be seen that maleic hydrazide at both rates of two and four pounds per acre caused a severe reduction in the weight of the clippings and growth of grass. It also brought about a serious loss of the green color."

A letter from Dr. Fred V. Grau, Chairman of the Turf Committee, Crop Science Division, American Society of Agronomy, summarizes well the feeling of turf research workers at several stations:

"On January 23, 1953, a memorandum was sent to members of the Turf Committee requesting data and views on maleic hydrazide in order to formulate a statement for guidance of the public.

"Response to the request has been good, but documented evidence in the form of research data is scanty. Some of the data presented have not been approved for release. Considerable work is in progress.

"The attitude of the Turf Committee is reflected in these statements which represent virtual unanimity. These are not direct quotes:

Treated plots develop more crabgrass.

The mower industry will continue to flourish.

Much more experimental evidence is needed.

We do not feel that maleic hydrazide can be used as a substitute for the mower on special-purpose turf areas.

Treated plots developed more clover. Considerable permanent damage to turf resulted.

All indications to date are negative

because reduced vigor of grass permits weed invasion.

Maleic hydrazide might be useful where power-mowing equipment cannot be used."

In the light of these data we feel that much more work must be done with maleic hydrazide before it can be recommended on specialized turf areas. Any chemical which retards or interferes with the normal physiological processes within a plant must be used with caution. If it is tried on special-purpose turf areas, it should be on an experimental basis until more favorable documented evidence is available.

QUOTES

Notes from a talk by P. V. Cardon, Director of the Graduate School and Research Administrator, Emeritus, U. S. Department of Agriculture, given at Open House, Texas Research Foundation, Renner, Texas, May 21, 1952. Dr. Cardon is President of the 6th International Grassland Congress.

"Knowledge derives from fact.

"Fact is disclosed by research.

"Research is everybody's business.

"Whether or not you are consciously engaged in it, you are unmistakably affected by it.

"Research . . . is merely a systematic quest for truth.

"Whenever you set out to improve your way of doing something you conduct a type of research. . . . You simply determine the facts and then permit

IT'S YOUR HONOR

In the Levinson Home

To THE USGA:

My entry blank was addressed to "John W. Levinson", "W." being my 10-year-old son's middle initial. When I informed him of this and that I had opened the letter, he said: "You saw it was from the USGA so you should have known they meant me. They undoubtedly want me to play this year". All this with a dead serious face and with no hint of humor. He has managed to break 50 on the first nine at our course several times, so I think that, when in the not unforeseeable future I discontinue the competitive phase of the game, continuity and tradition will be maintained.

Incidentally, Betty feels that Jack Westland did her a great disservice in winning the Amateur last year. This has given me the illusion that I have at least nine more years in which lightning might strike and confronts her with the prospect of another decade of unflinching avocational devotion to the practice tee from April through September.

JOHN O. LEVINSON
CHICAGO, ILL.

Regional Turf Service

To THE USGA:

You have asked for an expression of opinion on the Regional Turf Service program you set forth, from the various green committee chairmen. I, for one, think it is a great idea, and I have sufficient leeway under the Green Committee budget as it has been annually approved at Elmwood, to assure you that this Club will support the project fully.

MILTON A. JENTES
ELMWOOD COUNTRY CLUB
WHITE PLAINS, N. Y.

From North Texas State

To THE USGA:

My judgment is that you have been wise in reinstating the five North Texas State golfers, for I feel that the young men will do everything in their power to cooperate fully.

I was happy to have your expression of appreciation for my attitude. I should like to assure you that I shall do all in my power to see that every policy is complied with in the fullest possible manner.

J. C. MATTHEWS
PRESIDENT
NORTH TEXAS STATE COLLEGE
DENTON, TEXAS

To THE USGA:

Just a note of appreciation for my reinstatement as an amateur. I feel like you are giving me one more chance than I really deserve. I realized that I had violated the rules and I wasn't expecting any special consideration in the probationary period. You just don't know how happy you made me and I am thanking you from the bottom of my heart for giving me this "one more chance". I promise you that I will be trying to do right, and I hope that from now on we are on the same side of the fence.

MARION HISKEY
DENTON, TEXAS

To THE USGA:

My sincere thanks for special consideration in amateur reinstatement. Appreciate action and your interest very much. Will always have highest respect for USGA and its amateur code.

JOE CONRAD
DENTON, TEXAS

Editor's Note: The USGA Journal invites comments on matters relating to the welfare of the game and will publish them as space permits.

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