



USGA JOURNAL

AND
TURF MANAGEMENT

A GIFT FOR "GOLF HOUSE"



Ben Hogan, a golfer of whom you may have heard previously, is shown here sharing smiles with Isaac B. Grainger, President of the USGA, as he presented to "Golf House" the ball with which he completed his victory in the 1953 British Open. "Golf House" previously had received the ball Hogan used in cementing his win in the 1953 USGA Open, and the two balls are displayed side by side.

APRIL 1954



USGA JOURNAL

AND
TURF MANAGEMENT

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USGA COMPETITIONS FOR 1954

Americas Cup Match—August 12 and 13 at the London Hunt and Country Club, London, Ontario, Canada. Men's Amateur Teams: Canada vs. Mexico vs. United States.

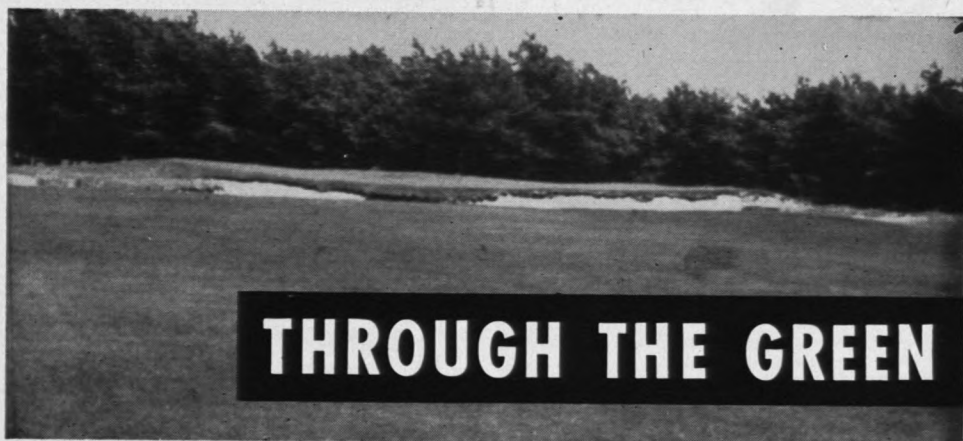
Curtis Cup Match—September 2 and 3 at the Merion Golf Club, Ardmore, Pa. Women's Amateur Teams: British Isles vs. United States.

(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.)

Championship	Entries Close	Sectional Qualifying Rounds	Championship Dates	Venue
Open	May 24	June 7	June 17-18-19	Baltusrol G. C. Springfield, N. J.
Women's Open	June 21	none	July 1-2-3	Salem C. C. Peabody, Mass.
Amateur Public Links	†June 4	‡June 20-26	Team: July 10 Indiv: July 12-17	Cedar Crest G. C. Dallas, Texas
Junior Amateur	July 6	July 20	August 4-7	The Los Angeles C. C. Los Angeles, Cal.
Amateur	July 12	July 27	August 23-28	C. C. of Detroit Grosse Pointe Farms, Mich.
Girls' Junior	August 16	none	Aug. 30-Sept. 3	Gulph Mills G. C. Bridgeport, Pa.
Women's Amateur	August 30	none	Sept. 13-18	Allegheny C. C. Sewickley, Pa.

†Entries close with Sectional Qualifying Chairmen.

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



Walter Travis' Putter

The chances of Walter Travis' original Schenectady putter being returned to the Garden City Golf Club, in Garden City, N. Y., seem increasingly remote, and the Club already has set a substitute in its place of honor.

More than a year ago, in September, 1952, a night-time thief broke the glass in which this most famous of all putters was encased and spirited it away. He took nothing else, did no other damage and left no clues. The putter was too decrepit for use.

There was hope, for a time, that the putter might be returned as quietly as it had been removed. If it is recovered at all, it can only be with the assistance, anonymous or otherwise, of the individual who removed it since it had no marks which would distinguish it from any other old Schenectady.

This factor compounds the villainy and increases the helplessness and indignation felt by those who treasure history and tradition.

Travis, who was a member of the Garden City Golf Club through most of his career, borrowed the center-shafted putter in an attempt to regain his putting stroke for the 1904 British Amateur Championship at Sandwich, England. The man who loaned it to him was A. W. Knight, who had conceived and developed the model in Schenectady, N. Y. Travis

putted his way to the first American victory in that Championship with the Schenectady. Center-shafted clubs immediately were banned in Britain, but Travis continued to use it for fourteen years in this country.

Garden City acquired the famous putter in 1918 when Travis played an exhibition against Findlay S. Douglas at that Club for the Red Cross. The members were in a most generous mood. Howard Maxwell paid \$500 to the Red Cross for the privilege of caddying for Travis, and Albert R. Fish gave an unspecified amount for the right to caddie for Douglas. Travis became imbued with the spirit of the occasion and, at the conclusion of the match, permitted the Red Cross to auction off his putter. Lewis H. Lapham won the putter for the Club with a bid of \$1,500.

Hogan's Lowest

Ben Hogan's lowest round is a statistic to conjure with and to dream about.

To keep the record on this phenomenal player of golf straight, the lowest score he has made over 18 holes is 61, and he did it in an informal round at the Seminole Golf Club, in Palm Beach, Fla., on March 21, 1954.

The course measures 7,006 yards and par is 72. Hogan went out in 31 and came home in 30. He made eight pars, nine birdies and one eagle—on the 510-yard

fourteenth where his second shot stopped two feet from the hole. Only 24 of his strokes were putts.

How Juniors Make It

The Rules of Amateur Status, for obvious reasons, permit a boy to accept expenses in connection with a golf competition until he reaches his eighteenth birthday, and 55 of the 128 qualifiers in the last Junior Amateur Championship reported receiving such help from outside their families in order to play at the Southern Hills Country Club, in Tulsa, Okla. Conversely, 73 reported they had received no outside financial assistance. A regulation of the Championship prevents a boy for receiving aid from a commercial source.

Amounts varied considerably, of course, depending on the length of the

journey for boys from different parts of the country. The most generous assistance appeared to come from a club in Massachusetts which raised \$340 for one of its caddies who had qualified. Individual boys from Arizona, Arkansas, Pennsylvania and Washington, D. C., were reimbursed for all their expenses by their clubs or local associations, as were five from Wisconsin. Most of those who received help, however, received considerably lesser amounts, ranging from \$25 to \$150.

More of the qualifiers traveled by airplane than by any other means. To be exact, 43 flew to Tulsa, 41 went by automobile, 36 by train, 6 by bus and 2 by a combination of these mediums.

Nearly half of the players traveled with other qualifiers from their sections. Some 54 shared the trip in this fashion, while 33 traveled alone, 15 were accompanied by a friend, 13 by their USGA Junior Championship Committeeman and 13 by one or more members of their family.

The USGA customarily arranges with a college or boarding school near the Championship to house qualifiers at a reasonable rate, and 115 took advantage of this arrangement last year to sleep and eat at the University of Tulsa whence bus service was provided to the club without charge. The remaining 13 either lived in the immediate vicinity, were housed with friends or stayed with their parents in a hotel or motel.

Nearly all the qualifiers used caddies during the Championship, but 14 planned to save a few dollars by carrying their own bags. All but four stood ready to play in the consolation stroke play tournament for first-round losers at the Tulsa Country Club, and 61 of a possible 64 turned up for this event.

Walker Cup Site

The famous Old Course at St. Andrews, Scotland, has been selected as the site for the 1955 match for the Walker Cup. The dates will be May 20-21, as previously announced.

Rules Made Easy



Warren Orlick, professional at the Tam O'Shanter Country Club, Orchard Lake, Mich., has been assigned by the Professional Golfers Association to assist its members in developing an increased understanding of the Rules of Golf. Here he explains Rule 29, with the aid of a specially devised chart, at one of his many Rules of Golf clinics.

In the British Amateur

Although this is the bi-centennial of the Royal and Ancient Golf Club of St. Andrews, Scotland, the United States participation in the British Amateur apparently will be on a somewhat lesser scale than in recent years.

However, nearly twenty indicated their intentions early of playing at Muirfield, Scotland, the last week of May. Among them were George F. Bigham, Jr., of Fort Belvoir, Va.; John S. Breckinridge, Jr., of Larchmont, N. Y.; Laurence E. Carpenter, Jr., of Springfield, N. J.; Richard D. Davies, of Bainbridge, Md.; John W. Foley, Jr., of Trenton, Mich.; Clarke Hardwicke, of Los Angeles, Cal.; John G. Hendrickson, of Fort Belvoir, Va.; W. J. Wallace, Jr., of Pomona, Cal.; O. F. Woodward, of Palm Beach, Fla., and Hamilton W. Wright, of Sharon, Conn.

Also, Theodore S. Bassett, of Rye, N. Y. Robert L. Eichler, of San Francisco; James B. McHale, Jr., of Philadelphia; Sean Meaney, of Fort Lauderdale, Fla.; Lt. Hugh H. Mullin, Jr., of Brookline, Mass.; John M. Schumacher, of Lincoln, Neb.; Dr. E. Malcolm Stokes, of Garden City, N. Y., and Frank Strafacci, of Garden City, N. Y.

Entries are certified by the USGA and must reach Scotland by April 27.

Of these early entrants, Davies, Hardwicke, Meaney, Schumacher and Strafacci were the only ones who indicated an intention of continuing on to the French Amateur, at Saint-Germain, the first week of June. These entries also are certified by the USGA and must reach France by May 20.

H. J. Whigham

The second Amateur Champion passed from the golfing scene at Southampton, N. Y., last month.

Henry James Whigham came to this country from Scotland in 1895, to lecture and write in the Midwest, and married the daughter of Charles Blair Macdonald, who won the first Amateur Championship that same year. Mr. Whigham succeeded his new father-in-law by winning at the Shinnecock Hills Golf

SPORTSMAN'S CORNER



Ben Hogan

This was at Augusta, Ga., during the 1953 Masters' Tournament.

After playing to the green of the tricky eleventh hole, a prominent player three-putted. He was so angry that he picked up his ball and threw it violently into a near-by pond.

About forty minutes later another prominent player came along. He, too, hit his second shot onto the green. He, too, three-putted.

But he picked the ball up, put it in his pocket and went calmly on to the next tee.

This was Ben Hogan, and he won the tournament with a new record score.

Club, in Southampton, in 1896 and repeating at the Chicago Golf Club in 1897.

At this time he wrote a book entitled "How to Play Golf," which lifts amateur eyebrows when it is observed in the Library at "Golf House." This was a natural activity for him, however, and was not prohibited by the Rules of that day. He also covered the Boer and Spanish-American Wars as a correspondent for Chicago and London newspapers and later became editor of Town and Country Magazine. He had attained the age of 84.

Contributed Most

Some time ago we wrote to a group of Champions and former Champions to invite them to donate clubs which had contributed to their victories, for our exhibits of Clubs of Champions in "Golf House."

The response all around was gratifying, but Congressman Jack Westland, of Everett, Wash., who won the 1952 Amateur Championship at the age of 47, injected a note of real wit into his contribution:

"At my age, I became so tired during the final that I believe this shooting stick, purchased in Scotland in 1934, contributed more to my victory than any club in the bag."

Permissible Prize

Rule 1-2a of the Rules of Amateur Status limits to \$150 the retail value of a prize or testimonial which an amateur may receive in a golf competition.

An individual who desires to remain an amateur under the rules of this Association should bear this clause in mind if he competes in a current driving contest of national scope.

A driving contest, like a hole-in-one contest, is considered a golf competition and a prize which consists of a two-week vacation at a resort hotel would be of a value far exceeding \$150.

When to Concede a Putt

If you don't know when to concede a putt and when to withhold the concession, you should confer directly with William B. Langford, of Chicago.

Mr. Langford, a golf-course architect, has devoted a good part of his golfing

hours in the last two decades to working out an empirical table of scoring probabilities for distances in the gimme range.

Since your opponent may be waiting over his ball hopefully right this minute, we take you immediately to the table:

**DISTANCE
IN INCHES****PERFORMANCE****DO I GIVE?****REDUCTIO AD ABSURDUM**

2	1 Miss in 2000 tries
3	1 Miss in 1000 tries
4	1 Miss in 667 tries
5	1 Miss in 500 tries

AYE**ANALYSIS OF THE GIMMIES**

6	1 Miss in 400 "
7	1 Miss in 333 "
8	1 Miss in 286 "
8.5	1 Miss in 250 "
9	1 Miss in 222 "
9.5	1 Miss in 200 "
10	1 Miss in 182 "
10.5	1 Miss in 167 "
11	1 Miss in 154 "
11.5	1 Miss in 143 "
12	1 Miss in 123 "
13	1 Miss in 125 "
14	1 Miss in 118 "
15	1 Miss in 111 "
16	1 Miss in 105 "

**BE
GENEROUS****BE
CANNY****PLAY
GOLF**

How the R. and A. Attained its Position

By LT. COL. JOHN INGLIS, C. M. G., D. S. O.

CAPTAIN, ROYAL AND ANCIENT GOLF CLUB OF ST. ANDREWS, SCOTLAND

On May 14, 1754, 22 Noblemen and Gentlemen, "being admirers of the ancient and healthful exercise of the Golf," met together at Baile Glass's Black Bull Tavern, in St. Andrews, Scotland, and drafted thirteen articles and laws for playing "The Golf". This was the origin of The Royal and Ancient Golf Club, then known as The Society of St. Andrews Golfers.

Having settled their articles and laws, the members subscribed for a Silver Club, paying five shillings apiece toward the purchase of this outward and visible sign of golfing prowess which was to be open for competition to all and sundry in Great Britain and Ireland.

First Selective Process

Until 1824 the winner of this Silver Club became automatically the Captain of the Society for the year and records exist of the scores made by the respective winners up to 1824.

After that year no scores are recorded and the competition became to be regarded as a competition in name only and not as a test of merit. It can therefore be inferred that it was from 1825 onwards that the holder of the Captaincy was decided by election.

In 1834 King William IV approved of the Society assuming the designation of Royal and Ancient Golf Club and in the same year became its patron.

Up to 1835 the Club was without any local habitation. It held its meetings at the Black Bull Tavern and elsewhere, leading apparently a sort of nomadic life. But in this year the Union Club was inaugurated for the benefit of such members of the Royal and Ancient or the St. Andrews Archers Club as might care to avail themselves of this privilege. Its premises were situated on part of the ground occupied by what was the Grand Hotel and is now a University Residence. Fifty-eight original members were ad-

THE AUTHOR AND ST. ANDREWS

The 200th anniversary of the Royal and Ancient Golf Club of St. Andrews, Scotland, will be celebrated next month.

The position of the R. and A. in the world of golf is unique. Although it is a single club, rather than an association of clubs, it is the custodian of the Rules of Golf and the governing body of the game in Great Britain and many other parts of the world.

The Captain of the Club, Lt. Col. John Inglis, has done a great honor to the USA Journal in tracing the Club's history in the accompanying article. Col. Inglis is steeped in the history and the traditions of golf, his father also having been a Captain of the R. and A. Col. Inglis is one of the comparatively few authentic experts on the Rules of Golf and was a member of the R. and A. Committee which wrote the present code in collaboration with representatives of the USGA and other foreign organizations three years ago.

A feature of the R. and A.'s bicentenary year will be a series of matches at St. Andrews during the week beginning May 31 between a representative British Amateur team and teams from Canada, Australia, South Africa and New Zealand.

mitted, the list including all or most of the leading golfers of the day.

In 1853 the Union Club, whose finances were sound but whose drains were not, decided to build a clubhouse on a new site and in 1854 the present clubhouse was built. It was the mutual wish of both clubs to amalgamate at that date, but it was not until 1876 that the actual amalgamation took place. It was then decided that:—

"The Union Club shall be merged in the Royal and Ancient, and that the latter shall be the sole designation of the amalgamated Club".

The membership of the Club had now grown to 750. The entrance money for members was £8, the annual subscription £3 and the sum payable for life membership £35.

CULMINATION OF TRADITIONAL CEREMONY AT ST. ANDREWS



Lt. Col. John Inglis (holding driver), the author of the accompanying article, rewards the caddie who retrieved his ball after playing himself in as Captain of the Royal and Ancient Golf Club of St. Andrews, Scotland, last fall. The three gentlemen in the background are Lord Simon, Lord Brabazon of Tara and Charles Grace.

Once provided with a home of its own, the prestige of the Royal and Ancient rapidly increased. Up till this date each golf club formulated its own code of Rules, though these were mostly based on those of The Honourable Company of Edinburgh Golfers or of the Royal and Ancient. But from this time onwards golf clubs old and new alike began to adopt the St. Andrews code and recognized the Royal and Ancient as the premier legislative body in the Golfing world.

Supreme Court of Rules

It was not, however, until 1897 that the Club became, at the request of other golf clubs in the United Kingdom, the authorized governing body of the game, with a Rules of Golf Committee appoint-

ed for this purpose, and the recognized ruling body of golf all over the world.

Gradually, however, differences in certain rules began to appear in the United States Golf Association code. After the Second World War both governing bodies felt that it was unsatisfactory to have two different codes for a game that had become world wide and that it would be for the benefit of the game if it were governed by the same Rules wherever it was played.

In 1951 a joint Committee of the United States Golf Association and the Royal and Ancient Golf Club, with representatives from the British Dominions, conferred and agreed on a unified code of Rules for use all over the world. This code came into force on January 1, 1952.

In addition to being the governing

body for the Rules, the Royal and Ancient Golf Club in 1919 took over the sole management of the Amateur and Open Championships, the formulation of rules governing amateur status and the selection of teams for the Walker Cup and Dominion Matches. In 1948 the management of the Boys Championship was also taken over.

How did the Royal and Ancient Golf Club attain the position it holds in the world of Golf today? Undoubtedly from its long and continued connection with golf, where the game was played 200 years before the Club was founded and where the wisdom and experience of years has accumulated and been handed on from one generation to another.

All In The Family



United Press Photo

Recent visitors to "Golf House" were Mr. and Mrs. John B. Beck, of Ascot, England, who are shown here examining Robert T. Jones, Jr.'s famous putter "Calamity Jane."

Mr. Beck was Captain of the British Walker Cup Team which scored the only British victory, at St. Andrews in 1938. He also was Captain of the British side in the first renewal of the Matches after the war.

Mrs. Beck, who was Irish Ladies Champion in 1938 and has many times represented Ireland in Home Internationals, will be Captain of the British Isles Team in the Curtis Cup Match at the Merion Golf Club, Ardmore, Pa., next September.

Mr. and Mrs. Beck are the only husband and wife to serve as Captains of Walker Cup and Curtis Cup Teams.

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, 1954. Booklet, 25 cents (special rates for quantity orders). Poster, 25 cents.

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. Poster 10 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 CLUB, a reprint of a USGA Journal article detailing various types of competitions. No charge.

PROTECTION OF PERSONS AGAINST LIGHTNING ON GOLF COURSES, a poster. No charge.

MOTION PICTURES ON GOLF (list). No charge.

HOLE-IN-ONE AWARDS. No charge.

AMATEURISM IS IN THE HEART, a reprint of a USGA Journal article by E. G. Grace. 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.

Spectators off Fairways at the Open

By JOSEPH C. DEY, JR.
USGA EXECUTIVE DIRECTOR

A new pattern of guiding and controlling galleries appears to be emerging in American major golf tournaments. The essence of it is that spectators stay off areas, on the sides of the course.

The idea will receive its Open Championship baptism when the 54th event in the USGA series is played in June at the Baltusrol Golf Club, Springfield, N. J.

The basic principle is not new. For some years several holes at the Augusta National Golf Club in Georgia have been so roped off during the Masters tournament that spectators remained entirely off the fairways. Last year a similar scheme was adapted to the Birmingham Country Club course near Detroit for the Championship of the Professional Golfers' Association of America. Before all this, the Royal and Ancient Golf Club of St. Andrews had used the plan on certain holes of the Old Course for British Championships.

At Baltusrol in June, almost all fairways will be roped off so that spectators will not walk on them. As has long been customary, all putting greens and tees will be roped. Where bottlenecks occur on contiguous holes, spectators will either be restrained from entering blind alleys or will cross from one side of the fairway to the other side on narrow walkways after shots have been played. In no case, according to the plan, will spectators form arcs in the fairways while strokes are being made.

The advantages of this system are manifold, among them being the following:

For players:

The condition of the course will be maintained at a high level because of absence of thousands of spectators' footmarks in playing areas, especially fairways and approaches to putting greens, where delicate strokes are made.

Pace of play will be faster, as galleries

PAR FOR OPEN TO BE 70

Par will be 70 for the 54th USGA Open Championship to be played over the Lower Course of the Baltusrol Golf Club on June 17-18-19. Total yardage will be 7,027; if alternative tees are used on the 4th and 6th holes, it will be 6,949.

Par for the first nine will be 34. This is two strokes lower than for the 1946 Amateur Championship at Baltusrol. The reductions were made at the first hole and the seventh holes, both of which are within reasonable range of second shots by professionals. At the first a forward tee will be used to make the hole 465 yards long; the seventh will be played at approximately 468 yards.

In recommending a yardage basis as the starting point for computing par, the USGA suggests 445 yards as a general limit for par 4. However, the way the hole plays is the ultimate determining factor, and both the first and the sixth at Baltusrol are actually par 4s for pros.

Yardage and par for Baltusrol's Lower Course follow:

<u>Hole</u>	<u>Yards</u>	<u>Par</u>	<u>Hole</u>	<u>Yards</u>	<u>Par</u>
1	465	4	10	450	4
2	379	4	11	421	4
3	444	4	12	190	3
4	183 (160)	3	13	391	4
5	391	4	14	409	4
6	467 (412)	4	15	427	4
7	468	4	16	201	3
8	372	4	17	620	5
9	204	3	18	545	5
3,373 (3,295)		34	3,654		36
Total yards—7,027 (alternative: 6,949)					
Total par—70.					

will be automatically marshalled to the sides of the course and should provide little or no interference or delay to play.

Players without large galleries who follow immediately behind "star" attractions will not be disturbed and delayed by thoughtless spectators who, in the past, have been so absorbed in watching the "stars" that they have paid scant heed to the players following.

For spectators:

There will be wider areas of visibility. Thus, galloping down fairways for preferred positions will scarcely be necessary. More play can be seen more easily with less walking and general effort.

As spectators will be off the course, there will be much less hazard of being struck by golf balls.

For the Championship management:

It will be easier to maintain the course in good condition.

There will be less likelihood of balls striking spectators. Thus, lucky and unlucky "breaks" will be minimized and fair play furthered.

Marshalling spectators will be simplified.

The test provided by the course will be kept more nearly normal and uniform. Rough immediately adjacent to the fairways will not be trampled by thousands of feet, and so will serve the purpose for which it was intended — to reward accuracy in play.

Plans for gallery guidance at the Open have been worked out by Charles P. Burgess, General Chairman of Baltusrol's committees; John C. Smaltz, Chairman of the Gallery Committee; John D. Ames, Chairman of the USGA Championship Committee, and Robert Trent Jones, golf course architect who has advocated such a scheme for some time and who has made some revisions in the Baltusrol Lower Course in recent years.

The test at Baltusrol in June may go far to determine the future pattern of gallery guidance in major tournaments.

Sectional Qualifying Rounds

Sectional qualifying rounds, at 36 holes, have been scheduled at 32 locations for this year's Open Championship. They will be played on Monday, June 7.

Entries must reach the USGA office by 5 P.M. on Monday, May 24.

The starting field in the Championship proper at Baltusrol on June 17 will comprise 162 players. Prize money will again total \$20,000, with \$5,000 to the winner.

Ben Hogan will be seeking his fifth Open Championship. Only Hogan, Bob

Jones and Willie Anderson have won the Open four times.

Following are the places where Sectional Qualifying will be held:

ALA.	Birmingham	C. C. of Birmingham
ARIZ.	Phoenix	Phoenix C. C.
CAL.	Los Angeles Sacramento	Hillcrest C. C. Del Paso C. C.
COLO.	Denver	Denver C. C.
FLA.	Daytona Beach	Daytona Beach G. & C. C.
HAWAII	Honolulu	Waialae C. C.
ILL.	Chicago	Twin Orchard C. C.
IOWA	Des Moines	Des Moines G. & C. C.
LA.	New Orleans	New Orleans C. C.
MD.	Baltimore	Mount Pleasant G. C.
MASS.	Boston	Winchester C. C.
MICH.	Detroit	Plum Hollow G. C. and Franklin Hills C. C.
MINN.	St. Paul	North Oaks G. C.
MO.	Kansas City St. Louis	Indian Hills C. C. Westwood C. C.
N. J.	Montclair	Montclair G. C.
N. Y.	Long Island Rochester Troy Westchester	Rockville C. C. and Hempstead G. C. Brook-Lea C. C. C. C. of Troy Winged Foot G. C.
N. C.	Burlington	Alamance C. C.
OHIO	Cincinnati Cleveland	Cincinnati C. C. Canterbury G. C. and Beechmont C. C.
OKLA.	Oklahoma City	Oklahoma City G. & C. C.
ORE.	Portland	Tualatin C. C.
PA.	Philadelphia Pittsburgh	North Hills C. C. and Sandy Run C. C. Longue Vue C.
TENN.	Nashville	Richland G. & C. C.
TEXAS	Dallas Houston Midland	Lakewood C. C. Pine Forrest C. C. Midland C. C.

PGA REPRESENTATIVE AT OPEN

Jack Mitchell, professional at the Essex Country Club, West Orange, N. J., has been appointed representative of the Professional Golfers' Association for the 1954 Open Championship. It will be his function to represent the PGA in questions of mutual interest which may arise in connection with that Championship.

An Aid to All Handicappers

By WILLIAM O. BLANEY
CHAIRMAN, USGA HANDICAP COMMITTEE

Handicap computation methods contained in USGA Golf Handicap System for Men are based primarily on a player's lowest 10 scores—the lowest 10 of his last 50 scores for Basic Handicaps and the lowest 10 of his last 15 scores for Current Handicaps.

When fewer than the required number of scores have been posted by a player, his Basic Handicap is computed from a figure equal to ten times the average of the lowest 20 per cent of all available scores and his Current Handicap is computed from a figure equal to ten times the average of all available scores except the five highest.

The USGA Handicap Differential Conversion Table on the opposite page is designed to eliminate two steps and make handicap computation just as easy when fewer than 10 scores are used as when the full 10 scores are used.

The upper part of the table contains the Handicap Differentials to use when computing a player's handicap from the total number of scores shown at the top of each column (1 to 10, inclusive). The figures in each column represent only the lowest Handicap Differential of all the differentials in each bracket for the handicaps in the left-hand column. For example, the Handicap Differentials for a 21 handicap computed from a total of nine scores ranges from 220 to 231, inclusive. The figure 220 shown in the nine-score column of the Conversion Table is the lowest of all these differentials. A differential of 219 would fall in the 20 handicap bracket just above, while a differential of 232 would fall in the 22 handicap bracket just below.

The lower part of the Table, headed "Course Rating Factors," contains the proper equivalents of the ten-times-the-course-rating figure to be deducted from the players' score total for the number of scores used. These factors have been computed for course ratings of 66 to 75, inclusive. For other course ratings, multiply

the rating of the course by the number of scores to be used and list the resulting factors under the proper column. For greater speed and accuracy, it is suggested that red lines be drawn above and below all the Course Rating Factors opposite the official rating of the course at which this Table is to be used.

To illustrate how to find a player's handicap through the use of the Conversion Table, let's assume the player has posted 21 scores on a course rated 71 and wants a Basic Handicap.

	96
Select the 4 lowest (20% of 21 scores)	93
	92
	90
	<hr/>
Add these scores together	371
Deduct the Course Rating Factor for a 71 course rating in the 4-score column	—284
	<hr/>
This leaves a 4-score Handicap Differential of	87
Apply this differential (87) to the 4-score differential column and get a handicap of	18
Note: This differential of 87 is higher than 83 (the lowest differential in the 4-score column for an 18 handicap) and lower than 88 (the lowest differential for a 19 handicap).	

A further saving in time can be effected if each handicapper will make a special Conversion Table showing score totals (instead of differentials) for use only at his own course. Such a table can be made by adding the Course Rating Factors applicable to his course to all the Handicap Differential figures in each score column immediately above said factors. (Minus differentials, of course, should be deducted from the Course Rating Factors, not added to them.) The special table thus produced will eliminate one more step and it will not be necessary to show any Course Rating Factors on it.

This special Conversion Table also can be used to find the handicap of a player who has posted the required total number of scores (50 for Basic -- 15 for Current), as the figures in the 10-score column at the right have been included especially for this purpose.

USGA HANDICAP DIFFERENTIAL CONVERSION TABLE

Number of Scores Used

Handicap	1	2	3	4	5	6	7	8	9	10
+ 3	— 5	— 11	— 16	— 22	— 28	— 33	— 39	— 44	— 50	— 56
+ 2	— 4	— 8	— 12	— 17	— 21	— 25	— 30	— 34	— 38	— 43
+ 1	— 3	— 6	— 9	— 12	— 15	— 18	— 21	— 24	— 27	— 31
0	— 1	— 3	— 5	— 7	— 9	— 10	— 12	— 14	— 16	— 18
1	— 0	— 1	— 1	— 2	— 3	— 3	— 4	— 4	— 5	— 6
2	+ 1	+ 2	+ 3	+ 3	+ 4	+ 5	+ 5	+ 6	+ 7	+ 7
3	2	4	6	8	10	12	14	16	18	19
4	4	7	10	13	16	20	23	26	29	32
5	5	9	14	18	22	27	31	36	40	44
6	6	12	18	23	29	35	40	46	52	57
7	7	14	21	28	35	42	49	56	63	69
8	9	17	25	33	41	50	58	66	74	82
9	10	19	29	38	47	57	66	76	85	94
10	11	22	33	43	54	65	75	86	97	107
11	12	24	36	48	60	72	84	96	108	119
12	14	27	40	53	66	80	93	106	119	132
13	15	29	44	58	72	87	101	116	130	144
14	16	32	48	63	79	95	110	126	142	157
15	17	34	51	68	85	102	119	136	153	169
16	19	37	55	73	91	110	128	146	164	182
17	20	39	59	78	97	117	136	156	175	194
18	21	42	63	83	104	125	145	166	187	207
19	22	44	66	88	110	132	154	176	198	219
20	24	47	70	93	116	140	163	186	209	232
21	25	49	74	98	122	147	171	196	220	244
22	26	52	78	103	129	155	180	206	232	257
23	27	54	81	108	135	162	189	216	243	269
24	29	57	85	113	141	170	198	226	254	282
25	30	59	89	118	147	177	206	236	265	294
26	31	62	93	123	154	185	215	246	277	307
27	32	64	96	128	160	192	224	256	288	319
28	34	67	100	133	166	200	233	266	299	332
29	35	69	104	138	172	207	241	276	310	344
30	36	72	108	143	179	215	250	286	322	357
31	37	74	111	148	185	222	259	296	333	369
32	39	77	115	153	191	230	268	306	344	382
33	40	79	119	158	197	237	276	316	355	394
34	41	82	123	163	204	245	285	326	367	407
35	42	84	126	168	210	252	294	336	378	419
36	44	87	130	173	216	260	303	346	389	432

COURSE RATING FACTORS

Course Ratings	1	2	3	4	5	6	7	8	9	10
66	66	132	198	264	330	396	462	528	594	660
67	67	134	201	268	335	402	469	536	603	670
68	68	136	204	272	340	408	476	544	612	680
69	69	138	207	276	345	414	483	552	621	690
70	70	140	210	280	350	420	490	560	630	700
71	71	142	213	284	355	426	497	568	639	710
72	72	144	216	288	360	432	504	576	648	720
73	73	146	219	292	365	438	511	584	657	730
74	74	148	222	296	370	444	518	592	666	740
75	75	150	225	300	375	450	525	600	675	750

What's behind Slow Play

By MRS. HARRISON F. FLIPPIN
CHAIRMAN, USGA WOMEN'S COMMITTEE

The evil of slow play is that it imposes the will of a minority upon the majority. The speed of the fastest player is cut down to that of the slowest.

Life on a golf course is community life, a sharing of the use of eighteen holes with other players. This necessitates that certain golf manners prevail.

The duty of keeping one's position or giving way is fully as important in this code of manners as the duty of replacing divots and smoothing footprints in sand.

Discharge of this duty is complicated, however, by the fact that it is more difficult to recognize in ourselves a tendency to be slow than it is to recognize our divot marks and footprints.

As a matter of simple fact, we never hear a golfer admitting he is a slow player—although we hear an infinite number of snails disclaim all snail-like tendencies. Slowness usually is related to one or more of three factors. We should periodically check our own golfing habits against these characteristics of slow play:

1. Practice swings before every stroke. It is hardly necessary to engage in repeated rehearsals of our intentions once the ball is in play. The violinist tests his strings before he starts, but not again before each phase. We don't change our theory of hitting the ball unless we are desperate.

2. Indecision in choosing one's club. Judgment of distance should be almost automatic. In most cases, a player should be able to narrow the choice to one of two clubs before reaching the ball. Actually, the choice thereafter may not be important when the distance to the green is short; there is only eight or ten yards difference between a woman's No. 7 and No. 8 irons. How she plays the stroke is a good deal more important than which club she uses in that case.

3. Undue deliberation on the putting

NEW MEMBERS OF THE USGA

REGULAR

Irvine Coast Country Club, Cal.
Marlin Country Club, Texas
Mayfield Heights Players Club, Ohio
Mount Anthony Country Club, Vt.
Paradise Valley Country Club, Ariz.
Sundown Ranch Country Club, Ariz.
William Land Golf Club, Cal.
Woodberry Forest Golf Club, Va.

ASSOCIATE

Annapolis Roads Country Club, Md.
Highlands Golf Course, Kans.
Mayfair Country Club, Fla.
Rocky Point Golf Course, Wash.

green. While tension increases to a greater degree here, the time required for three or four players to hole out and re-try their missed putts sometimes is half as long again as the time it took them to get onto the green. An experienced player should be able to gauge the roll and speed of a green quickly in most cases, and a re-tried putt is nothing more than locking the barn door after the horse has been stolen.

All of us have personal knowledge of club groups which are guilty of these habits and which wind their weary way around the course in four and one half or five hours.

All of us have been in the groups caught helplessly in their wake.

Let us reassess our own playing habits, then, and give greater consideration to those behind us.

Someday I should like to see a flag or tombstone tournament conducted on the basis of time, rather than strokes taken. In this event par for the round for a couple would be 2 hours and 45 minutes and each would be required to stop when their time ran out and plant their flag.

Such an event would provide the slow-down on the slow players.

The Real Snead Story

By WILLIAM C. CAMPBELL

MEMBER, 1951 AND 1953 WALKER CUP TEAMS

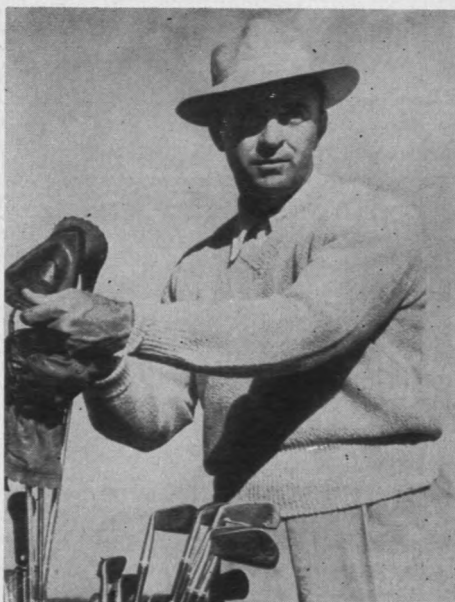
You probably know Samuel Jackson Snead as the world's most naturally talented striker of golf balls. Like golfers everywhere, you have doubtless marveled at his rhythmic swing and flowing power, as universal standards of golfing perfection. But you may not know much about Sam himself. I welcome this chance to tell you something of the Snead that you do not read about or see at the golf tournaments.

Sam is gifted with a beautiful physical coordination that is no less amazing than are his supple strength and his trigger-quick mental and physical reflexes. Accordingly, golf is just one of the sports at which he has excelled. As a high school star in football, baseball, basketball, track and boxing, he was the prototype all-around athlete.

Many observers have commented on Sam's strong and flexible back, shoulder and arm muscles. Actually, of even more importance to his unrelenting golfing prowess through the years have been the relaxed strength and bounce of his athletic legs.

Proof of Sam's participation in many sports can also be seen in his strong fingers and hands, of which various bones have been broken. These repaired bones combine with his unique double-jointedness to make an impossible task for any one who would try to emulate exactly the appearance of Sam's golf grip. Incidentally, his peculiar hand conformation has misled many students of golf, who have failed to reconcile his open clubface at top of backswing with the apparent straightness of the back of his left hand at maximum wrist-cock.

Surely you have in your mind's eye an accurate picture of Sam's smooth power-in-motion swing. Just a word here will suffice: I suppose that no other



Sam Snead

golfer has ever combined such an upright plane of arc with such width of arc at the point of impact. His full pivot, long arms, loose shoulders and high hands at top backswing provide a tremendous leverage of power, whereas his clubhead describes through the impact area a path that is as horizontal to the ground as is possible unless the hips were to sway through the ball.

I regard this wide-arc-at-impact feature as the one basic common mechanical denominator among all the really top golfers. In Sam's extreme case, it probably explains why he can consistently hit "soft" iron shots that seem to drop lazily on the green, with little forward force, yet with sharp backspin.

Snead's Best Advice

The other basic prerequisite is likewise in Sam's favor: an unfailing sense of timing. Characteristically, he does not

Reprinted from Royal Canadian Golf Association's Annual Golf Review, 1953.

care about the numerical weight or swing-balance specifications of his clubs, relying rather on his own "feel" in choosing his equipment (witness his battered 15-year-old "irreplaceable" driver!).

He is blessed with an uncanny sense of balance and timing, the two points I have heard him emphasize most often. He once cautioned me about a fast backswing on a long-driving hole with this revealing gem of golfing wisdom: "If you want to hit a nail especially hard with a hammer, you don't jerk it back and slash at it. Rather, you draw it far back nice and slow, gather your power and, with careful aim, let 'er rip. Now, why not drive a golf ball that way?"

Sam is a true child of nature, reveling in the environment of forests, mountains and streams, and possessing an unbelievable affinity toward wild life.

He is a true "ridgerunner," preferably with a pack of dogs at his heels. He seems to have a sixth sense concerning the whereabouts and instincts of animals which, together with his marksmanship, explain his reputation through the mountains as an expert hunter and fisherman.

The local lore about his prowess at field and stream approaches the legendary. Certainly golf could not at all compete with these other out-of-door sports for Sam's preference and abiding vocational interest if fortunes could be amassed in mountain streams or deep forests.

When Sam Plays Best

This proclivity towards nature, this quality of naturalness, explains why Sam has reduced his tournament schedule in recent years. Of course the income-tax laws have not been without effect in this direction, but essentially it has just been a case of his allergy to the commercial aspects of tournament golf. True, he plays golf as a business, but in the process he is not immune to office nerves, which are soon frayed by the unnatural pressures of crowds, noise, travel, hotels and even competition for the dollar. He has learned at such times to get back to his natural habitat in the hills, where the tensions

are eased and he becomes once more his relaxed self.

A week or two thus "off the circuit," and he is ready to rejoin the fray. You will note that it is after these returns to the hills that Sam plays his best tournament golf, because he is then doing his best thinking.

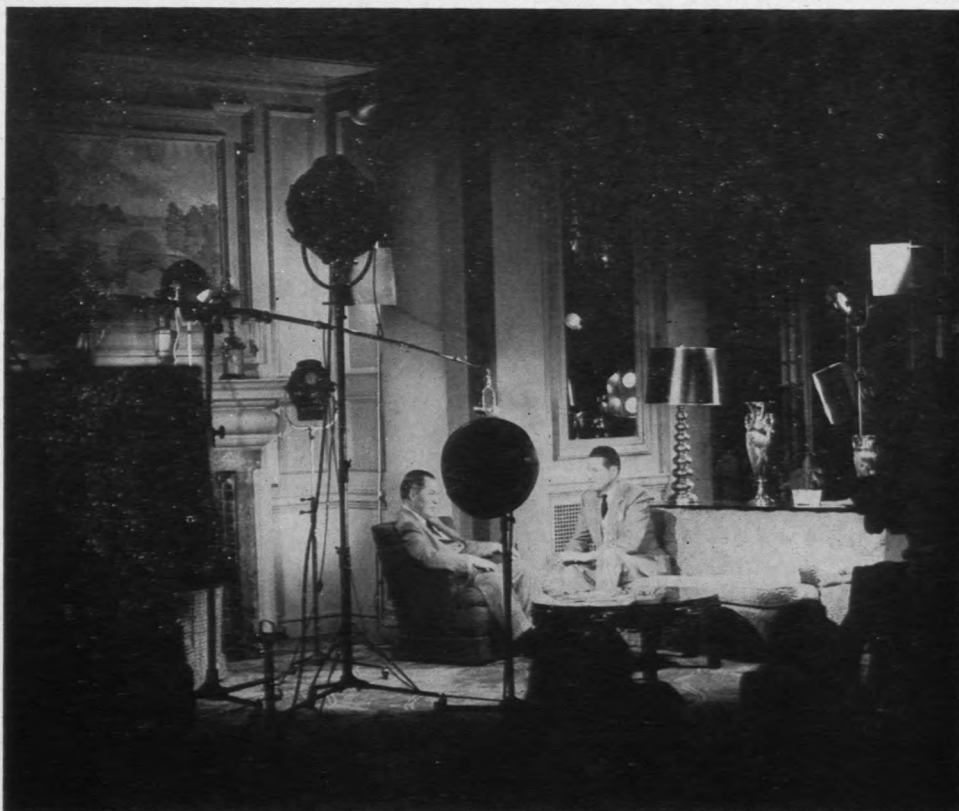
When Sam does win his first Open, as he surely someday must, and thereby completes his great record, someone will do the Snead Story for the movies or for a book. If proper research is done, people will think the resulting story can only be fiction.

They will learn things they never knew about Sam: for example, that Sam's older brothers before him had the same Snead swing and hit the ball prodigious distances (especially the mighty Homer) when Sam was still knocking acorns about with hickory branches.

They will learn that, before turning to golf, Sam worked in a restaurant and still is a good cook, that he played the trumpet in a dance band, that his ambition was to be a clothes tailor, at which work he had some amusing and short experience, that he has a good singing voice and claims that his golf timing would be better if he could play golf to musical accompaniment, that he has a tremendous sense of fun and is a most amusing raconteur of droll stories which could earn him a fancy living on the banquet circuit should he ever tire of golfing, that he has a remarkable memory for events, places and competitive situations, that he is careful to stay physically trim, to sleep long, to eat properly and never to smoke or drink, that he has consistently exercised a keen yet cautious financial acumen in saving money and choosing wise investments, so that he is already truly a West Virginia capitalist whose considerable wealth includes a healthy balance of bonds, annuities and good farmlands, even though Jimmy Demaret still insists that Sam's backyard is buried deep with tomato cans filled with cash.

Ever since, at the age of 15, I tagged

ANALYZING THE SECRET OF GOLF



Robert T. Jones, Jr., and Horton Smith, President of the PGA, chat in an introductory scene from the new 30-minute instructional film, "Keep 'Em in the Fairway," which was premiered in Augusta, Ga., during the Masters Tournament. The film was produced by Dallas Jones Productions for PGA and Life magazine and also features Ben Hogan, Sam Snead, Lloyd Mangrum, Jerry Barber, Cary Middlecoff, Walter Burkemo, Ed Oliver, Jimmy Demaret, Lawson Little, Byron Nelson, Lew Worsham, Pat Abbot, Miss Louise Suggs, Bing Crosby and Bob Hope. It sets forth the five fundamentals which the PGA believes to be present in every good golf swing and is being distributed in connection with National Golf Day (June 5).

along as Sam's partner when he won our state pro-amateur title, I have studied him closely and come to know him well. I am convinced that if he knew in his heart how great a golfer he really is, thanks to doing what comes naturally, the rest of the field would have no choice but to scramble for second-place money. Despite this basic humility and occasional lack of confidence, Sam has put together an amazing record. At 41 years of age, after 17 years of major competition, he is still going strong; and he will still be

winning tournaments, or at least be the sentimental favorite, when most of the younger stars of today are retired to their rocking chairs.

Beyond and above his golf, in which sport he must be recognized as truly a phenomenon, Sam is a fine gentleman and a wonderful friend, always his delightful, unspoiled, impulsive self. Just as his native golfing genius has remained essentially unchanged through the years, so has his sound character and appealing personality.

Minneapolis Juniors Start to Shine

By BILL CARLSON

GOLF WRITER, MINNEAPOLIS STAR AND TRIBUNE

Junior golf, golf for the kids, has made rapid strides all over the country in recent years, but in Minnesota the strides have been with seven-league boots.

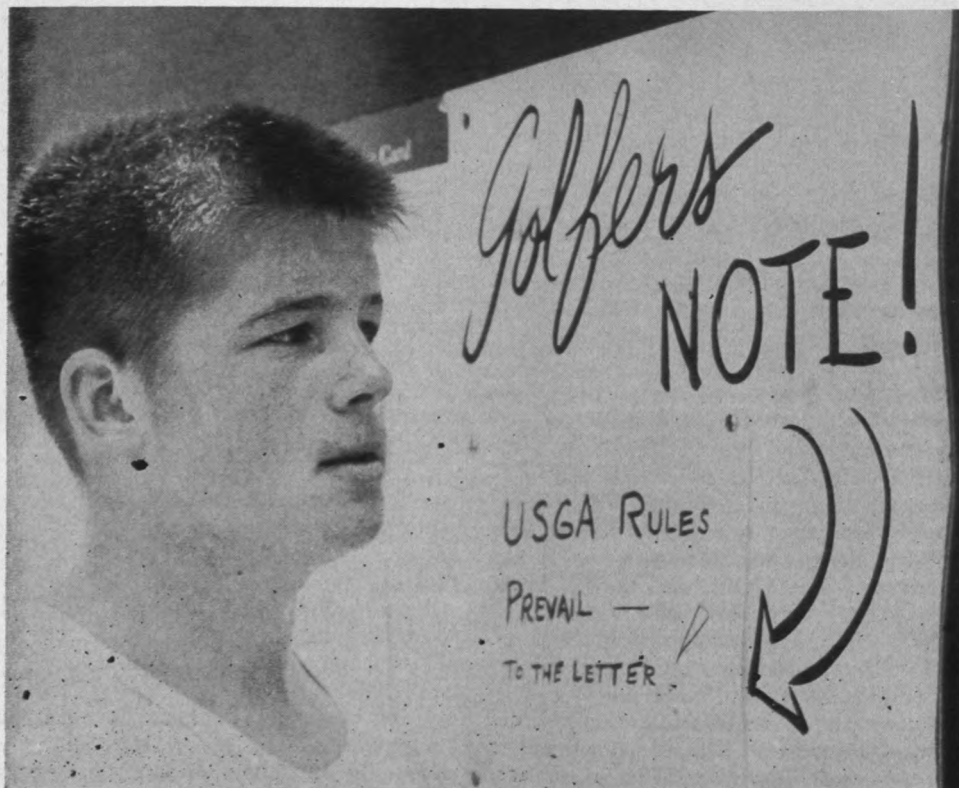
In the Minneapolis-St. Paul area, the attention paid to golfing kids is ten times what it was five years ago, and the caliber of golf has increased in the same measure.

One of several reasons is a tournament sponsored annually by the Minneapolis Star. The Star claims it to be the largest, as well as the best, of its type in the coun-

try and is proud of the way it is handled. The boys play the rules to the letter, as the accompanying photograph indicates.

A record number of youngsters entered the 1953 tournament, the 18th annual, and out of the 312 entrants came its greatest champion. Tom Hadley, a 16-year old youngster who won from 17-year old Bill Crowl, once hit a tee shot 308 yards. Three times in the final he used a No. 5 iron to get home with his second shot on par-5 holes.

Hadley, whom Les Bolstad, University



An entrant in the Minneapolis Star's annual junior golf tournament takes cognizance of the rules of the day. His name is King Atwood.

of Minnesota golf coach, calls "the boy Jimmy Thompson," is only 5 feet, 8 inches in height and 160 pounds in weight. But at 17 he pounds the ball as far as anybody in Minnesota. He qualified with rounds of 72 and 71 on the longest public course in Minnesota and St. Paul, Meadowbrook, where the Amateur Public Links Championship was played in 1947. Par at Meadowbrook is 36-37-73, so Hadley was three under. In those 36 holes, he had 10 birdies, another record.

Former Star junior champions have done well. Bill Waryan later won the Minnesota Open. John Falldin, Judd Ringer, Don Waryan, Karl Dosen, Bob Tickle and Tom O'Neil, all former Star champions, have had their names engraved on trophies in almost every golf event from Minneapolis to Keokuk. Hadley, like these, may go far.

Golf As It Should Be Played

In some junior tournament, the committee says, "Oh, they're only kids. Let 'em go." Thus, the boys play "winter rules," tee up the ball wherever they find it, ignore the penalties for a lost ball, out of bounds and/or in water and forget the little niceties of the game.

Not so in the Star's tournament. The boys play according to the book and they have no difficulty knowing what the book says, either. Each contestant is given a USGA Rules of Golf booklet when he arrives at the first tee.

Alfred W. Wareham, a member of the USGA Public Links Committee, says "Getting Rules books to these youngsters is almost as good a thing as staging this tournament."

The boys read the Rules, too. They prove that with the number of questions they ask.

Minneapolis is Totton P. Heffelfinger's city, and he has reason to be proud of the kind of golf the boys play. The President of the USGA the last two years can look all around him and find top-grade junior golfers wherever he looks.

One of those individually responsible is Les Bolstad. He spends extra hours all winter keeping his driving nets open and giving free lessons to youngsters who show particular talent.

Another is Karl Raymond, of the Minneapolis Park Board, who not only arranges for a week of free play for entries in the Star tournament but also permits sectional junior tournaments at each of the five Park Board courses every year.

There are dozens of others, including several golf bodies which stage tournaments in the area and the USGA and the Junior Chamber of Commerce, which conduct competitions of national scope.

From now on, watch Minnesota. In spite of the shortness of the golf season in this area, junior golfers are stepping out.

Conduct of the Tournament

1. Every youngster in Hennepin County (Minneapolis and suburbs) is eligible if he's under 18 on June 1 each year.
2. The tournament is conducted without charge to any entrant.
3. Biggest entry list was last year--312 kids.
4. Everybody plays 36 holes free. After that, the low 80 golfers are picked for match play.
5. Match play is conducted with 32 in the championship flight, and 16 each in three other flights.
6. For the championship flight, there are two 18-hole rounds on Wednesday, the first day of match play. This brings all four flights down to the quarter-finals for Thursday. Semi-finals are Friday and finals Saturday. In the finals, the championship flight plays 36 holes. The other flights play 18 holes.
7. The tournament is shifted, on a round robin schedule, from one Minneapolis Park Board course to another each year.

The Earliest Balls and Clubs

By JOHN P. ENGLISH
USGA ASSISTANT EXECUTIVE DIRECTOR

Golf as we know it was originally played with a leather-covered ball stuffed with feathers, and the principles of the present Rules of Golf were developed in this era. The feather ball remained the standard missile for at least four centuries, until about 1848. Featheries undoubtedly were in use far longer than that, but the details of golf's origin are lost in antiquity.

It is known that the Romans in their day of Empire, played a game called *paganica*, which involved the use of open countryside, a bent stick and a ball stuffed with feathers. In the first century before Christ, Romans overran Europe, crossed the Channel and occupied parts of England and Scotland. They did not withdraw until the fourth century after Christ. It is therefore assumed that their game of *paganica*, with its feather ball, was the forerunner not only of golf but of kindred games played in Holland, Belgium, France and England.

However the transition from *paganica* to golf may have been made, "*fute-ball* and *golfe*" had become so popular in Scotland by 1457 that they threatened the practice of archery for defense and the Parliament of King James II outlawed both sports. This proscription provided the earliest authentic evidence of the existence of golf, and the proscription apparently remained effective until the introduction of gunpowder near the end of the fifteenth century lessened the importance of archery and restored golf to the people.

Featheries Were Seldom Round

The making of feather balls was a tedious and wearisome task, and most ball-makers could produce only about four specials a day. The best balls sold for up to five shillings apiece; in bulk,

From an exhibit of the development of clubs and balls in "Golf House."

"GOLF HOUSE" FUND

The "Golf House" Fund has crept upward to \$102,326 since the last issue of the USGA JOURNAL, and the number of Founders now stands at 5,562. We still need \$7,674, however. The recent Founders have been:

INDIVIDUALS

Bob Crook
Leaman S. Harvey
Roland L. Kahler
Keith Kallio
Jack Mitchell
Lester H. Oppenheim
E. L. Rasmussen
In Memoriam—Warren B. Townley
by Arthur Townley

CLUBS

Echo Lake Country Club, N. J.
Jumping Brook
Golf & Country Club, N. J.
Knickerbocker Country Club, N. J.
Ridgewood Country Club, N. J.

ASSOCIATIONS

Iowa Golf Association
Western Seniors' Golf Association

rarely less than 1 pound for a dozen. In the making, the leather was softened with alum and water and cut into four, three or two pieces. These were stitched together with waxed threads outside in and reversed when the stitching was nearly completed. A small hole was left for the insertion of boiled goose feathers. The ball-maker held the leather cover in his hand, in a recessed ball-holder, and pushed the first feathers through the hole with a stuffing rod, a tapering piece of wrought iron sixteen to twenty inches long and fitted with a wooden crosspiece to be braced against the ball-maker's chest. When the stuffing iron failed, an awl was brought into play, and a volume of feathers which would fill the crown

WHAT THEY PLAYED WITH TWO CENTURIES AGO



These clubs and feather balls in the USGA Golf Museum at "Golf House" date back to the earliest days of the game. The two clubs at the left were called "track irons," designed to enable a golfer to play a ball out of a wheel track. The third club from the left was called a "bunker iron," or "sand iron" and was made about 1780. The three woods at the right were characteristic of the feather era.

of a beaver hat eventually was inserted into the leather cover. The hole was then stitched up, and the ball was hammered hard and round and given three coats of paint.

Feather balls were seldom exactly round. In wet weather they tended to become sodden and fly apart. They were easily cut on the seams. A player was fortunate if his ball endured through two rounds.

Originally, there appear to have been ball-makers in each golfing community, but in the middle of the eighteenth century the Gourlay family, of Leith and Musselburgh, Scotland, became preeminent and a "Gourlay" was accepted as the best and most expensive of all the feather balls on the market. The patriarch of the family was Douglas Gourlay, at Leith, but it was his son at Musselburgh, who brought the family name its greatest renown.

Their principal competitor was Allan Robertson, of St. Andrews, son of Davie Robertson, tutor of Old Tom Morris and generally regarded as the greatest player of his day. Robertson, who died in 1859 at the age of 44, turned out 2,456 feather balls in 1844 and was unalterably opposed to the introduction of the gutta percha ball shortly thereafter. When he caught Old Tom Morris playing a gutta ball in 1852, they had words, and Morris left St. Andrews, not to return until after Robertson's death.

No Matched Sets Then

The full, free style which has come to be known as the "St. Andrews swing" developed out of the feather ball period. The clubs, which were at first rudimentary, tended toward the end of the period to be long, thin and graceful; and the feathery was swept from the ground with a full swing which also tended to be long

and graceful. The shafts were whippy, and the grips thick. There was a considerable elegance to these clubs. The foremost club-makers, Hugh Philp and Douglas McEwan, have become known as the Chippendale and Heppelwhite of club-making.

The earliest known club-maker was William Mayne, of Edinburgh, who received a Royal Warrant as club-maker and spear-maker from James VI in 1603. An old notebook of this same period indicates the nomenclature of clubs Mayne must have made by noting payments for the repair of "play clubis," "bonker clubis" and an "irone club." There are no known examples of these clubs, although some were pictured in the art of the times so that their rudimentary nature is known.

Among the oldest known clubs is a set of six woods and two irons preserved in a case in the Big Room at the Troon Golf Club, Troon, Scotland. These were found in a walled-up closet of a house at Hull, England, with a copy of a Yorkshire paper dated 1741. It is possible that they are of Stuart times. All six woods and two irons are shafted with ash. Only one wood and one iron have grips. The woods are leaded and boned, the lead extending from near the toe two-thirds of the way to the heel. Although the stamp is too worn for identification, they could have been made by Andrew Dickson, of Leith, or Henry Mill, of St. Andrews, who were well-known club-makers of the Stuart era and next in our line of knowledge after Mayne.

Club-making reached its zenith in the last century of the feather ball era, with the advent of the real artists — Simon Cossar, of Leith; the successive generations of McEwans, James, Peter and Douglas, of Leith and Musselburgh; Hugh Philp, of St. Andrews, and his assistant, James Wilson; and White, of St. Andrews. Cossar, Philp, Wilson and the McEwans were noted for their woods; Cossar, Wilson and White for cleeks and irons. White is credited with giving Allan Robertson and Young Tom Morris such refined irons that they were able to in-

troduce a wide range of new strokes into the game.

Douglas McEwan made his club-heads from small cuts of hedgethorpe which had been planted horizontally on sloping banks so that the stem grew at an angle at the root and created a natural bend for the neck. The shafts, spliced onto the heads, were made of split ash.

By the first half of the nineteenth century, clubs had come to be divided into four classes: Drivers, spoons, irons and putters.

Drivers were distinguished by their long, tapering and flexible shafts and their small raking heads. They comprised "play clubs, which had little loft and were designed for use over safe ground only, and "grassed drivers," which had more loft and were designed to lift a ball from a heavy or downhill lie or over a hazard. Spoons were of four types: long spoons, middle spoons, short spoons and baffing spoons, the distinctions being in the degree of loft. For a time there was also a fifth spoon, the niblick, a well-lofted club with a small head designed to drive a ball out of a rut or cup. Irons were three in number: driving irons, cleek and bunker irons, and their uses are apparent from the terminology. There were two types of putters: driving putters, for approach work over unencumbered terrain, and green putters, for use on putting greens.

With these sets, players negotiated their feather balls over holes measuring 80 to 400 yards.

In the era of the feather ball there were no Championships as we now know them, but four of the great players of the period returned this card in a feather-ball match at St. Andrews in 1849:

Willie and Jamie Dunn:

OUT—6 5 4 6 6 6 4 4 5—46

IN—5 3 5 6 5 5 6 6—46—92

Allan Robertson and Tom Morris Sr.:

OUT—6 5 6 5 5 5 4 4—45

IN—6 4 5 6 5 5 5 6—48—93



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. "54-1" means the first decision issued in 1954. "R.37-7" refers to Section 7 of Rule 37 in the 1954 Rules of Golf.

Water-Hazard Rule Requires Three-Stroke Penalty

USGA 53-37
R. 1, 33-2

Q: During one of our stroke play events, one contestant drove on a short water hole and her ball landed in the confines of the hazard, but not in the water, thus enabling her to play the ball from the hazard. In doing so, her ball hit a rock in the hazard and bounced back into the water. She dropped a ball in front of the hazard and to the right with a clear shot to the green.

I ruled the player had not played the ball from the teeing ground into the hole by successive strokes as required by Rule 1 as she had not dropped her ball in accordance with Rule 33-2a or b.

Question by: MRS. K. S. OGILVIE
EVANSTON, ILL.

A: The ruling was incorrect. The player should have been penalized three strokes.

Under the principle of Rule 33-2a, the player was entitled to drop a ball behind the water hazard so as to keep the point at which the ball lay in the hazard, after her unsuccessful stroke, between herself and the hole, under penalty of one stroke.

However, the player did not drop the ball in conformity with the pertinent Rule. The penalty for violation of Rule 33-2 in stroke play is two strokes.

It is noted from your sketch that the player did not drop the ball nearer the hole.

Ball Played Outside Teeing Ground Comes to Rest Out of Bounds

USGA 53-38
R. 1, 7-2, 13-2

Q: In stroke play A played his first stroke from outside the teeing ground and the ball clearly landed out of bounds. He played his second stroke from within the teeing ground. His fellow-competitor, B, said that a penalty stroke should be added to A's score in accordance with Rule 29-1a. A insisted that no penalty stroke should be added, because he played his first stroke from outside the teeing ground and therefore the ball was not in play from the beginning of the stroke. Is A right?

Question by: KOMYO OHTANI
KYOTO, JAPAN

A: A is correct. There is no penalty other than that stipulated in Rule 13-2. The stroke played outside the teeing ground was not a stroke in the stipulated round (Rule 7-2) and did not bring the ball into play. Therefore, the fact that it came to rest out of bounds was irrelevant.

Insect May Be Frightened Away from Ball

USGA 53-39
D. 17; R. 23-3

Q: When a fly landed on a player's ball, could he have taken a lighted cigarette and held it above the fly, the heat of the cigarette most naturally making the fly move

without touching the ball?

Question by: IRA L. ADLER
LANSFORD, PA.

A: Yes, provided the cigarette did not touch the ball or the fly.

An insect is not a loose impediment when it adheres to a ball (Definition 17) and may not be removed by cleaning the ball (Rule 23-3). However, there is nothing in the Rules to prevent a player from frightening an insect or other animate being.

Ball Enmeshed in Wire Screen

USGA 53-42
R. 31-2

This refers to USGA Decision 53-23, in which it was stated that the player may not measure through an immovable obstruction in determining where to drop a ball under Rule 31-2.)

Q: Suppose a ball in play became enmeshed in a wire screen which is an obstruction. On which side should it be dropped?

Question by: SAMUEL Y. BOGGS
JENKINTOWN, PA.

A: Either side.

Small British Ball Used on One Hole

USGA 53-43
R. 2-3; 11-1,3; 36-5; 40-3g

Q: A and B were playing against C and D in a four-ball tournament. At the seventeenth hole C noted that A had used the small British ball on that particular hole. A agreed he had used the ball, not knowing it at the time. B won the hole with a par 5, making A and B 1 up. The match was finished with a half on the eighteenth and C asked for a ruling.

After deliberation the Rules Committee decided that Rule 41-7 applied and disqualified team A and B, giving the match to team C and D. Appreciate your interpretation at your earliest convenience.

Question by: WILLIAM C. NEWMAN
SIASCONSET, MASS.

A: We do not concur in your decision, although it was final (see Rule 11-3).

Your statement of the facts indicates that C did not make a claim before the players played from the eighteenth teeing ground, as required by Rule 11-1. If this was the case, the hole should have stood as played.

Further, Rule 41-7 applies only to four-ball stroke play, and the situation you cite arose in four-ball match play.

If the claim had been made at the proper time, the Committee should have ruled that A had violated Rule 2-3. The penalty for a breach of this Rule is disqualification from the competition. In four-ball match play, this penalty does not apply to the partner, B (see Rule 40-3g and the principle regarding breaches of Rule 2 set forth in Rule 41-7a).

A committee is empowered by Rule 36-5 to waive or modify a penalty of disqualification, however, if it considers such action warranted in exceptional individual cases. For example, if the committee concluded that the illegal ball had been used inadvertently on only one hole, it might have disqualified the player only for that hole.

Stroke Could Be Replayed When Fellow-Competitor Interferes

USGA 53-44
R. 11-4; 26-3a,b; 41-8

Q: In four-ball stroke play, A, outside twenty yards, plays without requesting anyone to hold the pin.

1. B, his fellow-competitor, sees that ball is close, rushes to pull the pin and is struck. Rule 34-3b implies no penalty for A, since flagstick was not attended at A's request; but is B penalized? What is to prevent B from doing this maliciously?

2. In a similar situation, C, A's partner, does this. What is the decision?

Question by: MITCHELL ROSENHOLTZ
ST. PAUL, MINN.

A: 1. Rule 11-4 would over-ride Rule 26-3b in this situation, and A could have been permitted to replay his stroke without penalty to either side. Permission to replay the stroke could only have been granted at the time the incident occurred, however.

Since A was more than twenty yards from the hole and did not either request or tacitly consent to having the flagstick attended, Rule 34-3b does not apply.

2. A would incur a penalty of two strokes under Rule 26-3a. The penalty would not apply to C; see Rule 41-8.

Fourteen-Club Rule

USGA 53-45
R. 3, 36-5, 38-1

Q: During the qualifying round of medal play, one of the players discovered, after several holes, that she had fifteen clubs in her bag, and so advised the woman qualifying with her, a member of another team, who immediately reported the breach of rule

to the Rules Committee. The player having the fifteen clubs in her bag recognized the extra club as one belonging to a member of her team, who was at the time also playing her qualifying round. The club was sent to her out on the course by a caddie. The owner of the extra club had only thirteen clubs in her bag at the beginning of her qualifying round. The player who had breached the fourteen club rule continued to play, and at the end of the round the player qualifying with her, who was keeping her score, turned in an attested score for her after having previously reported the breach of the rule.

The Rules Committee official, having received the notice of the breach of the Rule before the attested score was turned in, disqualified the golfer breaching the Rule.

Then one of the players advised the Rules Committee later in the evening after the qualifying had been completed, that she had called an official of the USGA on the telephone and had been advised by him that the fourteen club rule did not necessarily apply in team matches to the extent of disqualification, that the penalty for breach of the rule in this instance could have been one, two or three strokes. It is certainly evident to me that there was a misunderstanding.

In my opinion, had the attested score been turned in before the breach of the rule had been reported, the player would not have been disqualified. Is this correct?

Although the tournament is over and the winning team has been declared Women's State Team Champion for 1953, the President of the Women's Division of the Virginia State Golf Association has requested me to present the matter to the USGA Rules of Golf Committee for an official opinion.

Question by: H. M. BLANKINSHIP
LYNCHBURG, VA.

A: Your committee's decision is final (see Rule 11-3), but we are pleased to offer our comments.

The competitor who started the competition with fifteen clubs violated Rule 3. The penalty is disqualification unless the committee sees fit to waive or to modify the penalty, as it is permitted to do under Rule 36-5 in exceptional individual cases when it considers such action warranted.

The competitor who accepted an additional club during her round from a fellow-competitor playing on the course also violated Rule 3, even though she had started with only thirteen clubs. The penalty, again,

is disqualification unless the committee sees fit to waive or to modify it.

The facts presented seem to indicate that the club concerned was inadvertently transferred from one player's bag to another before play began. If that is so, and if the player who temporarily carried the club did not use it, we feel that the Committee should have waived the penalty of disqualification in each case.

The marker who reported the violation of Rule 3 but turned in an attested score for the violator incurred no penalty. She was required by Rule 38-1 to do just that and to leave the imposition of the penalty to the committee, since the committee might choose to waive or to modify it.

In stroke play, the committee may impose a penalty whenever the facts requiring one become known and even after an attested score has been returned.

The official with whom you discussed the case by telephone undoubtedly was attempting to inform you that the disqualification penalty could be waived or modified, as explained above, if the committee so desired.

Ball Missed, Then Accidentally Knocked Off Tee

USGA 53-46

D. 5; R. 14, 27-1c

Q: A tees up his ball within the teeing ground, addresses it and swings with the intention of hitting it. He misses the ball completely. Then, in the act of wagging, he knocks it off the tee.

B says he is shooting 3 and must play the ball where it lies, even though it still lies within the teeing ground. A claims there is no Rule that covers this incident, that he can re-tee without penalty.

Question by: MRS. ARNOLD SIMENSEN
WINCHENDON, MASS.

A: A's ball lies 2, and he must play the ball as it lies.

Definition 5 provides:

"A ball is 'in play' as soon as the player has made a stroke on the teeing ground. It remains in play as his ball until holed out, except when it is out of bounds, lost, or lifted in accordance with the Rules or Local Rules."

Therefore, the ball went into play as soon as A made his first stroke and it was in play when accidentally moved. Rule 27-1c provides that the player incurs a penalty stroke in such a circumstance and must play the ball as it lies.

Rule 14 governs only when the ball is not in play.

Movable Obstruction DefinedUSGA 53-55
R. 31

Q. A ball was hit from the seventeenth tee and hooked, landing in fairly heavy grass about midway between a tree and a ball washer at the eighteenth tee, the distance between the tree and the washer being about two feet. This washer is on a post like a fence post driven about two feet or more in the ground and with a piece of iron V shaped on the bottom to keep it solid. These washers are placed at every tee as a permanent fixture and have never been removed even during the winter. The player who made the shot insisted he had the right to move this washer and with the aid of caddies was able to pull it out of the ground, claiming that under the Rules it was a movable obstruction on the course. He was then able to make a clear shot to the green and tie the match, suffering no penalty for his bad tee shot. The matter was referred to the Golf Committee but they couldn't agree as to whether the washer was or was not a movable object but did agree that it had been put there as a permanent fixture.

Question by: FRANK H. REYNOLDS
NEW YORK, N. Y.

A. The ball washer which you describe appears to be an immovable obstruction within the meaning of Rule 31. The player may have been entitled to relief under Rule 31-2, governing immovable obstructions, but he was not entitled to relief under Rule 31-1, governing movable obstructions.

A movable obstruction is one which may be moved only with reasonable effort, without unduly delaying play in violation of Rule 37-7 and without permanently impairing proper course maintenance.

The penalty for a violation of Rule 31-1 is loss of hole in match play and two strokes in stroke play; in four-ball play the penalty would not extend to the player's partner (see Rules 40-3g and 41-8).

Handicaps in Extended CompetitionUSGA 53-58
R. 36-1

Q. In a ladies' handicap tournament in which 32 have qualified on the basis of their current handicaps at the beginning of the qualifying round and whose pairings for match play over a period of four or five weeks have been drawn in accordance with their stroke play round, should the entire tournament be played with each competitor

using the same handicap that had been used in qualifying or, as this competition is over a four or five weeks period, should the surviving player use her then current handicap (assuming her handicap may have changed since playing the qualifying round) in effect at the time of each round of match play during the tournament?

Question by: MRS. ANITA MORRIS

ROCKVILLE CENTRE, N. Y.

A. The matter is one for the committee in charge to determine and publish prior to the competition. Rule 36-1 provides in part: "The Committee shall lay down the conditions under which a competition is to be played."

The USGA recommends that player's handicaps should not be changed during the progress of a competition that is to be completed within a week. For competitions extending over a longer period, each competitor should use his handicap in effect at the time each round or match is played. This applies to both Current Handicaps and Basic Handicaps.

This supersedes USGA Decision 52-72 and all previous on this subject.

When Ball Is LostR & A 53-59
Def. 6.

Q. A player played his tee shot and, on going forward, failed to find his ball, so, saying he would give that up and go back and play another, he proceeded to do so. The first ball was found by his opponent as soon as he had struck his second.

The dispute which later took place in the clubhouse was: (a) Whether the ball should be considered lost as soon as the player gives up the search and declares his intention of going back and playing another, although less than five minutes has elapsed since the search began, (b) Whether the ball can be considered still in play if found within five minutes but after the player has gone back and struck his second ball.

It is admitted that it is unlikely that the second alternative would occur within the five minute limit but the question there is purely theoretical.

A. Under Definition 6 a ball is lost if it be not found within five minutes. Provided the ball is found within that period and the player has not played another ball, other than the provisional ball, from the spot from which he played his previous shot, he can continue play with his original ball.



FIFTH GREEN SECTION OFFICE OPENED IN SOUTHEAST

The fifth office of the USGA Green Section has just been established in the Southeast, at the Georgia Coastal Plain Experiment Station, Tifton, Ga. The Regional Director is B. P. Robinson.

Primary function of the office is to provide the Green Section's new Regional Turf Service to USGA member clubs and courses in the following eight Southern states:

ALABAMA	MISSISSIPPI
FLORIDA	NORTH CAROLINA
GEORGIA	SOUTH CAROLINA
LOUISIANA	TENNESSEE

The Regional Turf Service is now available to USGA clubs in 25 states. The others, and the offices which serve them, are as follows:

Western Office, Davis, Cal. — Charles G. Wilson, Western Director:

ARIZONA	NEVADA
CALIFORNIA	OREGON
COLORADO	UTAH
IDAHO	WASHINGTON

Southwestern Office, Texas A & M College, College Station, Texas—Dr. Marvin H. Ferguson, Southwestern Director and National Research Coordinator:

ARKANSAS	NEW MEXICO
KANSAS	OKLAHOMA
MISSOURI	TEXAS

Northeastern Office, College of Agriculture, Rutgers University, New Brunswick, N. J.—Alexander M. Radko, Northeastern Director:

CONNECTICUT	NEW JERSEY
	NEW YORK

The Green Section is continuing its office at Beltsville, Md., in the Bureau of Plant Industry of the United States Department of Agriculture.

As soon as possible the USGA intends to make the Regional Turf Service available in states not now being serviced. It is hoped to establish Mid-Atlantic and Mid-Western Regions within a year and to extend the Northeastern Region to cover all of New England.

Under the Regional Turf Service, periodic visits are made by the USGA Regional Directors to individual courses and small group meetings are held with golf course superintendents, to share information and experiences about the best and the newest practices in turf management. Each individual visit is supplemented by a written report from the USGA scientist to the club. In addition, each Regional Office issues a Turfletter at least six times a year dealing with turf matters in its particular Region.

The Service is subscribed to by USGA member clubs and courses at annual fees,

which cover all work and expenses and which are based on estimated cost. The annual fee for an 18-hole course is \$100; for nine holes, \$75. There are no extra charges for travel. A percentage of each fee (currently 20%) will be appropriated by the USGA to research, primarily within the Region of the subscribing club.

Establishment of the USGA Southeastern Office at Tifton, Ga., is the natural result of several years of research cooperation there among the Southern Turf Foundation, representing the Southern Golf Association; the Georgia Coastal Plain Experiment Station, and the USGA Green Section. Now the research program is being strengthened and will feed the new program of direct service to golf courses. M. K. Jeffords, Jr., of Orangeburg, S. C., Chairman of the Southern Turf Foundation, was instrumental in bringing about the new arrangement.

B. P. Robinson's Background

B. P. Robinson, the USGA's Southeastern Director, developed Tifine (Tifton 127) turf Bermuda grass while Turf Specialist at the Georgia Coastal Plain Experiment Station. He had served in that capacity since 1951, devoting his time to research on turf grasses for the South and consultation visits to various turf areas in the Southeast. He is a member of the Turfgrass Committee of the American Society of Agronomy and is Chairman of the Turf Research Committee of the Southern Weed Conference.

Mr. Robinson, who is 32, was born in Dallas County, Texas, and was raised on



B. P. Robinson
Southeastern Director

a farm. He has a B.S. degree in agriculture and an M.S. degree in agronomy from Texas A & M College. In February, 1948 he accepted a Turf Research Fellowship at the Georgia Coastal Plain Experiment Station, sponsored by the USGA Green Section and several golf clubs in the Southeast. During the same year he entered North Carolina State College and began work on a Ph.D. degree in agronomy. A dissertation on the fertility relations of Southern turf grasses is now being completed.

Mr. Robinson is a Captain in the Marine Reserve. During World War II he served overseas with the First Marine Division, participating in the Cape Gloucester, Peleliu, Okinawa and Guam operations.

* * *

Much Interest In Northeast

When the Regional Turf Service was introduced in three Northeastern states recently, more than 200 green committee chairmen and golf course superintendents attended a series of district meetings. Of the USGA member clubs represented, approximately 88% expressed a desire to subscribe for the Service.

TURF MANAGEMENT

The book "Turf Management," sponsored by the United States Golf Association and edited by Prof. H. B. Musser, is a complete and authoritative guide in the practical development of golf-course turfs.

This 354-page volume is available through the USGA, 40 East 38th Street, New York 16, N. Y., the USGA Green Section Regional Offices, the McGraw-Hill Book Co., 330 West 42nd Street, New York 36, N. Y., or local bookstores. The cost is \$7.

NEW RESEARCH AND EDUCATION FUND

A new Research and Education Fund of the Green Section has been established by the USGA. Its purposes are to sponsor research on turf and its management and to help educate workers in turf, especially new workers.

The work financed by the Fund will be done primarily by educational institutions and agricultural experiment stations. Expenditures will be made mainly as grants, fellowships and research assistantships.

The USGA is inviting subscriptions to the Fund from any one interested. Each subscriber will determine the amount of his annual subscription, but the following minimum amounts are suggested:

Firms and organizations	100.
Individuals	50.

There is no limit on the amount acceptable.

The entire income to the Fund will be expended for research and education as outlined above. No part will be retained by the USGA for administrative costs. The USGA will contribute money from its own resources to the Fund, as well as the services of staff members.

The Green Section will keep in touch with work in progress and will be alert

to needs for new research. This will be done through the Green Section's National Research Coordinator, Dr. Marvin H. Ferguson, and the several Regional Directors in various parts of the country. This will help to insure efficient use of funds, to minimize duplication of research efforts, and to transmit results promptly to golf courses, through the USGA Regional Directors.

Subscribers to the Research and Education Fund will receive the following benefits:

1. An organized national program of research and education for better turf.

2. One subscription to the USGA JOURNAL AND TURF MANAGEMENT (seven times a year) and to all Turfletters issued by all USGA Regional Offices (each office issues approximately six editions a year.)

3. Assistance from Green Section agronomists on turf and related matters, through correspondence.

4. Right to attend small group meetings conducted by Green Section Regional Directors with golf course superintendents and club officials twice a year.

The Research and Education Fund is separate from the Green Section's Regional Turf Service to USGA members.

TURF FOR THE WEST

By CHARLES G. WILSON

WESTERN DIRECTOR, USGA GREEN SECTION

Since much of our turf selection and breeding work has been done in the East, there is quite a controversy over the merits of various grasses as they apply to western growing conditions. Widespread publicity has encouraged the acceptance of many of the newer turfgrasses outside their zone of adaptation. University of California at Los Angeles is the only western experiment station that has devoted much time and effort towards proving the newer grasses. This should not be construed to mean that there is a hands off attitude on the part of golf clubs. However, it does indicate that what may

be right for one section of the West may be entirely wrong for many other sections in this vast area.

The fact that there is no such thing as a miracle grass is worthy of constant repetition. The turfgrass itself is but one facet of the broad field of turf management which, among other things, includes mowing, fertilizing, watering, disease and insect control. Contrary to popular writings on the subject, we have yet to see a turfgrass that thrives under neglect. All of them require mowing, watering and fertilizing if they are to perform satisfactorily for the game of golf.

We can cite many examples of inferior grasses that do an admirable job under the hands of a good turf manager. Conversely, the best of improved grasses is worthless if not managed properly.

In choosing any turfgrass, or selection of grasses, one fundamental question remains paramount: Will the selection increase the golfer's enjoyment of his game? Secondary considerations are: (1) Is it adapted to the area? (2) What are its management requirements? (3) Is it an improvement over selections commonly used in the area? (4) Where should it be used? Answers to these questions can best be obtained by experimental testing on the individual course, supplemented by basic information from the USGA Green Section. It is hoped that the following information will prove helpful in deciding which turfgrasses are worthy of use in the West.

Kentucky Bluegrass

Throughout most of Colorado, Montana, Wyoming, Idaho, Utah, Nevada, Eastern Oregon and Washington, Northern California Valleys, the Bay Area and higher elevations in the Southwest, common Kentucky bluegrass does well. Its main failure relates to an inability to withstand close cutting, and thus, more and more, we see it relegated to rough areas. For such purposes it is admirably suited and will continue to be used. However, for tees and fairways it leaves much to be desired, and herein lies a strong future for the improved Merion bluegrass.

Much has been written concerning the superiority of Merion over common Kentucky bluegrass. The main points of superiority as compiled over a period of years are as follows:

IMPROVEMENT WHERE BLUEGRASS IS WELL ADAPTED: In almost all reports where Merion has been compared with common bluegrass and other bluegrass strains, Merion is a decided improvement. Unfavorable reports come from areas where bluegrass is not well adapted.

RESISTANT TO LEAFSPOT DISEASE: Do not confuse resistance with immunity. Merion may become slightly infected but



This silver trophy has been presented to the Golf Course Superintendents Association of America by the USGA in appreciation of the great contributions to the best interests of golf made by golf course superintendents. It will be held each year by the winner of the GCSA Golf Championship.

is vastly superior to common bluegrass where leafspot is prevalent. Leafspot is not too great a problem in the West. Other diseases such as dollarspot, brownpatch, rust, etc., can be just as disastrous to Merion as to common bluegrass.

ABILITY TO THRIVE UNDER CLOSE CUTTING: This is the most important consideration for our western golf courses, where close mowing is rightfully demanded by the golfer. Merion, because of its prostrate type of growth, has been successfully maintained at a height of 1/2 inch. Common bluegrass is damaged by cutting closer than 1-inch.

As with all turfgrasses, Merion has certain cultural requirements if it is to perform satisfactorily. Some of these are as follows:

HEAVY FERTILITY REQUIREMENTS: Me-

Merion is not a low-fertility grass. It requires periodic nitrogen feedings and also superphosphate if soils are low in this element. A good dense stand of Merion can assimilate 1 pound of actual nitrogen per 1,000 square feet per month of good growing weather. It further requires a non-acid soil with ample reserves of calcium and magnesium and is not too tolerant of alkaline conditions.

MERION DOES NOT LIKE WET FEET: Overwatering is decidedly detrimental. Merion is more drought tolerant than common bluegrass. It should be watered heavily and infrequently.

The Bentgrasses

Bentgrasses are used throughout the entire West. Along the coast they grow naturally in fairways, and of course they have universal acceptance on putting greens. Without bentgrasses in our cooler regions, golf would revert to the dark ages and become a pasture game. Two types (colonial and creeping) are in common usage. Colonials are used to some extent on greens along the northwest coast, although our personal preference would favor creepers. Colonial bents have their greatest future for fairway use, and as overseedings in bermuda-base greens. Creeping bents have their largest place on putting greens, and in cooler regions on tees as well if they are mowed closely. Your USGA Green Section has sponsored and encouraged improvement work with bentgrasses. This work has developed the following application for the West:

VEGETATIVE CREEPING BENT STRAINS: Every course in the West should give improved vegetative bents preference over the seeded seaside and colonials for putting-green use. There are several improved strains available, and all direct comparison tests with seeded bents have shown the superiority of these vegetated strains. True, they require regular feeding, close frequent mowing and disease and insect treatments as do the seeded bents. However, when managed properly they provide the golfer with the ultimate in playing quality and the superintendent with far less maintenance headaches.

The Arlington and Congressional mixture has out-performed seaside in practical tests at the Utah Copper Golf Course, Magna, Utah, and experimentally at the UCLA Turf Plots. On the old pie greens (several selections established in 1939 at Denver Country Club, Denver, Colo., and the Broadmoor Golf Club, Colorado Springs, Colo., Toronto bent is far superior to any of the seeded bents, with Cohansey running a close second. Cohansey has the further merit in southern sections of being a good hot-weather bent that is highly resistant to brown-patch. Arlington is our most dollarspot—resistant bent; Congressional is favored for snowmold resistance and excellent winter color, and Toronto does the best job of keeping out *Poa annua* in areas where tested.

POLY-CROSS BENT: We mention this because it is the first improved creeping bent that can be seeded. Unfortunately there is no seed available at the present time, and to our knowledge the only experimental plot in existence is at UCLA. This plot has not been established for a sufficient period of time to indicate superiority over Seaside if such superiority exists.

The Zoysiagrasses

Where adapted, the zoysias show promise of being drought tolerant, slow growing, highly resistant to disease and insect damage and require only a nominal amount of fertilizer to keep them in good condition. However, they have been inadequately tested in the West. At present they appear to show no promise in the Northwest, Inland Empire and Rocky Mountain areas. Further, their slowness in becoming established and the already excellent qualities of common bermuda in the southern belt make their widespread usage doubtful. Zoysia seems to have its widest usage on home lawns and other small turf areas and thus will be of only minor importance to golf clubs in the West for many years to come.

Improved Bermudagrasses

We can visualize a great potential for fine bermuda strains; especially as they

apply to putting greens in southwestern and southern California valleys. In these areas, bentgrasses are costly and difficult to maintain, and the common bermuda leaves much to be desired from the standpoint of putting quality. In the South we have both research and practical information to the effect that these improved strains are (1) more vigorous than common bermuda, (2) similar to bentgrass in texture and (3) present less of a transition period during the bermudagrass-ryegrass changeover. Possibly of even greater importance is that our northern golfers think they are playing on bentgrass when these strains are used.

The better-known varieties are Tifton 127, Gene Tift, Everglades 3 and Texas 35-A. We strongly urge our Member Clubs in the areas mentioned to experiment with any or all of these strains. We would further point out that Colonial bentgrass and *Poa annua* deserve consideration in over-seeding the bermuda base. *Poa* is a natural companion grass for bermuda, and a few of our southwestern clubs report that bentgrass will hold on all season to eliminate the necessity for heavy reseeding each fall.

On teeing grounds the U-3 strain still receives our preference over common bermuda. Its finer texture, winter hardiness, earlier growth and greater vigor under proper management should encourage more widespread usage. On fairways common bermuda leaves little to be desired if it is mowed closely and fertilized adequately.

Red Fescuegrasses

Illahoe and Rainier strains of creeping red fescue continue to perform better than either common red or chewings fescue along the coast and in the Inland Empire of Washington and Oregon. All of the red fescues show up poorly in California valleys and in the Southwest. Furthermore, even where well adapted, they are relegated primarily to high-cut fairways and roughs. We seldom find them making any appreciable showing on tees, and they are absolutely worthless on putting greens, even though a few courses con-

tinue to seed a little fescue into the greens each year. Hard fescue (strain of Sheeps fescue) does the best job on SCS Plots at Pullman, Wash., under eight to ten inches of annual rainfall. Its future may be great for non-irrigated roughs.

Meadow and Tall Fescue and Perennial Ryegrass

To our knowledge there has been no improvement work done on meadow fescue for turf use. UCLA is starting a selection and breeding program that is long overdue. For fairway use in combination with bermuda it is a natural addition throughout much of the West.

Alta and Kentucky 31 fescue show considerable merit for roughs and hard-to-hold banks where close mowing is not essential. They have also been tried on fairways and tees with poor to fair success. The coarseness, tendency to bunch and tendency to produce hard-to-mow seed-heads unless combed regularly overshadows the desirable attributes of wear resistance and drought tolerance. The heat tolerance of tall and meadow fescue also is a well established fact, and we will find these grasses growing in areas that are too hot for red fescues and bluegrass. Furthermore, they are fairly tolerant to alkaline conditions.

Quite often alta fescue seed is contaminated with ryegrass, and this may or may not be detrimental to the eventual stand, depending on location. Perennial ryegrass is a true perennial from the mid-California coastline north to Vancouver, B. C. In the inland valleys it is at best short-lived and not worthy of consideration. The main objection to ryegrass where adapted is its ragged appearance. Oregon State is starting some much-needed research on perennial ryegrasses.

Miscellaneous Turfgrasses

Much has been said in condemnation of *Poa annua*. We would point out that along the entire western coast and the higher elevations inland, *Poa* is being managed as a perennial, and thus is not an annual as the name implies. Even in the hot areas where *Poa* is a true annual, its prolific seeding tendencies make it a

natural companion crop for bermudagrass. We have observed many fine dense strains of this grass that provide ideal putting qualities and shudder to think what many golfers would do to their superintendents if *Poa* were suddenly to vanish from the scene. This most maligned of all turf grasses will someday attract the attention of a grass breeder who will slow its shortcomings for the benefit of our member clubs.

Redtop is still used to some extent in mixtures in seeding new areas and overseeding tees. We believe that much of this is done by habit rather than with thought for the eventual turf's benefit. Formerly

it was cheap in price and thus was used primarily as a filler in cheap grass seed mixtures. Today the price closely approaches that of good bentgrass which would be far more desirable.

Poa trivialis (shade bluegrass) is often noticed on teeing grounds and in wet, poorly drained areas where moderate summer temperatures prevail. Little is known about its desirable qualities although its presence on a tee, where it has not been seeded in many years, would indicate that wear resistance might be far greater than was formerly suspected. Here again selection and testing is a wide-open field.

NATIONAL GOLF FUND SUPPORTS TURF RESEARCH

By MARVIN H. FERGUSON

SOUTHWESTERN DIRECTOR AND NATIONAL RESEARCH COORDINATOR, USGA GREEN SECTION

Of the funds derived from National Golf Day in 1953, \$10,000 has been allocated for research in turf. The USGA Green Section was asked to make recommendations regarding the projects to be supported by these funds. Ten state research institutions, cooperating with the USGA Green Section, have accepted grants from the National Golf Fund.

Golfers who will match the net scores they make at their home clubs against the gross score Ben Hogan makes at the Baltusrol Golf Club, Springfield, N. J., on the forthcoming National Golf Day, Saturday, June 5, should be heartened by the following account of how turf research benefited from their participation last year:

Rutgers University, New Brunswick, N. J., is the recipient of a grant of \$2,000. This supports a fellowship for study of the causes of thatch in putting-green turf and methods of eliminating it. This problem is one of universal importance and Rutgers University is admirably equipped for undertaking a study of this nature.

The Texas Agricultural Experiment Station, College Station, Texas, has accepted \$2,000 in part support of an assistantship for the study of physical soil

properties in putting greens. Considerable information relating to this problem has been developed. There is still need for further study in order that the information available may be brought to bear upon the matter of soil compaction in putting greens. This is considered to be one of the most important problems in modern golf-course maintenance.

The Department of Horticulture of the Kansas State College, Manhattan, Kan., receives \$600 to be used in carrying out studies on clipping heights and their effect on the adaptability of turf species to the Central Great Plains Region. Other phases of research at Kansas State which are related to this consist of crabgrass and other weed control studies. The work proceeds under the able direction of Dr. William F. Pickett.

The University of California, at Davis, Cal., will use a grant of \$1,000 to support research in irrigation of turf. Watering of turf is one of the most poorly understood phases of golf-course management. Dr. R. M. Hagan, associate irrigationist of the University of California, has made outstanding contributions to a better understanding of watering practice. These studies have two objectives: (1) to save water, (2) to use water as effect-

ively as possible for the growing of better turf.

Purdue University, Lafayette, Ind., is the center for turf research in the Midwest. It has accepted a grant of \$1,000 to be used in a study of disease resistance in bluegrass. The University has assembled a large number of bluegrass selections from widely scattered areas. It is believed that some of these types may be resistant to some of the more serious diseases that attack bluegrass. Merion bluegrass, which is highly resistant to *Helminthosporium* leafspot, is the product of a similar selection and testing program which was conducted by the USGA Green Section prior to World War II. Such a study holds great promise.

The College of Pharmacy of the University of Illinois maintains an experiment station in Chicago. Staff members have been very helpful to golf-course superintendents in the Chicago area. A grant of \$1,000 has been placed at the University of Illinois, and it will be used to finance a fundamental study of *Poa annua*, chickweed and crabgrass. These are the three serious weed pests of northern golf-course turf. Too often weed control studies are undertaken without a complete understanding of the strength and weaknesses of the plant to be controlled. A study of the kind proposed will contribute a substantial "building block" to our structure of fundamental knowledge.

A grant of \$1,000 has been accepted by the Georgia Coastal Plain Experiment Station, Tifton, Ga. Tifton is recognized as the center of southern grass breeding studies. Dr. Glenn W. Burton, under whose direction this grant will be used, is one of the world's outstanding grass breeders. The grant will be used to support the further development of bermudagrass strains that will provide superior turf for golf courses in the South.

Cornell University, Ithaca, N. Y., has accepted a grant in the amount of \$600. Cornell scientists have devoted a great deal of attention to the control of weed and insect pests in turf, and they have pioneered in the field of studying grass-seed mixtures. Much has been accomplished in the direction of focusing at-

tention upon the practice of using annual or nurse-grass species to make up a large percentage of the grass seed mixture. The offering of good seed mixtures in the trade will result in better turf at lower cost on the golf course. It is proposed that this grant shall help to support such work.

A grant of \$500 has been accepted by the Oregon Agricultural Experiment Station, Corvallis, Ore. The money will be used in support of a study of possibilities for commercial scale production of seed of *Poa annua*, *Poa bulbosa*, and other annual winter-growing grasses that may come into greater use in winter turf in the South. Oregon is the center of turf seed production in the United States. Workers at the Oregon Agricultural Experiment Station are particularly well qualified to investigate matters pertaining to seed production.

Colorado A & M College, Fort Collins, Colo., has accepted a grant of \$300 which is to be used to get turf investigations started in the Rocky Mountain area. It will be used in conjunction with two turf scholarships which were established at Colorado A & M by the Trans-Mississippi Golf Association and which were described on page 16 in the USGA Journal of February, 1954. It is felt that these turf scholarships will be much more valuable to the recipients if turf investigations are being carried on at the College.

WATER QUANTITY AND RATE OF FLOW

One acre inch of water contains 27,080 gallons. If you have a pond that measures 208.7 feet square, this would equal one acre, or 43,560 square feet. If this pond were 15 inches deep, you would have 15 acre inches of water, or 27,080 gallons times 15, of 416,200 gallons, in your reservoir. If this pond is stream fed and your rate of flow in this stream is one cubic foot per second, you would be supplying one acre inch per hour, or 450 gallons per minute to your pond. 27,080 gallons of water is the average amount used in your home over a 5-month period. *The Bull Sheet*, Vol. 7, No. 8, February, 1954.

IT'S YOUR HONOR

Effects of Good Handicapping

TO THE USGA:

I wish you could see our club as it was three years ago and as it is now. It looks like the same place, but actually it isn't.

Without a good handicap system, our players had become inveterate clique players, but now we mix up pretty well and new members have little trouble getting into games. It has been good for our older members, too. Just recently one of them told me how much he enjoyed his golf last summer and that he had met a lot of fine new friends. Most of all he was surprised to learn that they were "right here in my own club!"

We have tried hard to follow every recommendation of the USGA and the CDGA and the results have simply changed our club from one of very passive interest in golf to one where just about all play and participate in club events.

And to show the usefulness of your handicap system, last Labor Day I paired ninety-four fellows in five handicap flights. Every match was played on schedule, and seventeen matches went extra holes.

PAUL BERRYHILL
DECATUR, ILL.

"An Invaluable Aid"

TO THE USGA:

Thank you for the report and suggestions for improvements needed at Bel-Air made by Charles G. Wilson, Western Regional Director of your Green Section.

Work such as he is doing is an invaluable aid to a country club and I want to thank the USGA for making this aid available.

JOE NOVAK
BEL-AIR COUNTRY CLUB
LOS ANGELES, CALIF.

Thrilled

TO THE USGA:

Received Bob Jones' portrait, and I can't begin to tell you how thrilled and honored I am to have the greatest golfer of all time right in my own room. The warmth and inspiration from one glance is worth millions of bad shots.

FRANK STRAFACI
WOODHAVEN, N. Y.

An Appreciative Founder

TO THE USGA:

It is with a deep sense of appreciation that I accept your invitation to become a founder of "Golf House."

I have been in and around the game for many years and caddied for Harry Vardon at the Wannamoisett Country Club, Rumford, R. I., in 1900, and to me this was a real event. My dad was one of the owners of the original Metacomet Golf Club, in East Providence, R. I., later to become an additional nine holes to the Agawam Hunt Club.

My one regret is that I didn't save some of the relics that I have used in the past as contributions to the Museum.

JAMES P. LAWSON
CHICAGO, ILL.

Taylor On Hogan

TO THE USGA:

I don't think I've written since the splendid victory of Ben Hogan at Carnoustie, Scotland, last July. There have been other American winners of our Open, but I feel I am expressing the sentiments of all golfers in this country when I say there has been none more popular. I hope he will come this year to defend his well-earned title.

J. H. TAYLOR
NORTH DEVON, ENGLAND

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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"Golf House"

40 East 38th Street

New York 16, N. Y.

Joseph C. Dey, Jr., Executive Director
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USGA GREEN SECTION

South Building, Plant Industry Station, Beltsville, Md.

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