

# JUSGA JOURNAL AND TURF MANAGEMENT

## **CONTENDERS AND THE CUP**



With one thought in mind semi-finalists in the Women's Amateur Championship gaze longingly at the Championship trophy. Just after the happy picture was made JoAnne Gunderson, second from the left, defeated Judy Eller, on the left, and Jean Ashley, second from the right, defeated Mrs. Ann Casey Johnstone, on the right. Miss Gunderson, the 1957 Women's Champion, won again this year at the Tulsa (Okla.) Country Club by 6 and 5 over Miss Ashley.

SEPTEMBER, 1960



# USGA

TURF MANAGEMENT

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## **USGA COMPETITIONS FOR 1961**

Championship or Team Match	Entries Close	Qualifying Rounds	Dates of Event	Location
Open	Мау 3	Local: May 22 Sect'l.: June 6**	June 15-16-17	Oakland Hills C.C., Birmingham, Mich.
Women's Open	June 14	None	June 29-30, July 1	Baltusrol Golf Club, Springfield, N.J.
Amateur Public Links	*June 1	‡June 18-25	July 10-15	Rackham Golf Course, Detroit, Mich.
Junior Amateur	June 28	July 18	Aug. 2-5	Cornell University Golf Course, Ithaca, N.Y.
Girls' Junior	July 28	None	Aug. 14-18	Broadmoor Golf Club, Seattle, Wash.
Women's Amateur	Aug. 2	None	Aug. 21-26	Tacoma Country & G.C., Tacoma, Wash.
Walker Cup Match***			Sept. 1-2	Seattle Golf Club, Seattle, Wash.
Amateur	Aug. 9	Aug. 29	Sept. 11-16	Pebble Beach Course, Del Monte G. & C.C., Pebble Beach, Calif.
Senior Amateur	Aug. 30	Sept. 19	Oct. 2-7	Southern Hills C.C., Tulsa, Okla.

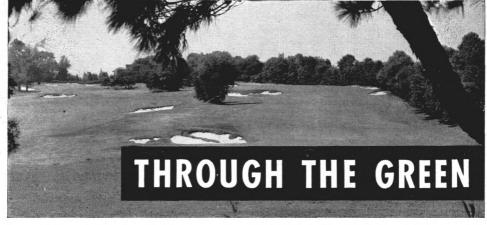
<sup>\*\*</sup> Open Championship: Sectional Qualifying Championships date may be changed to Monday,
June 5 if local authority in charge deems advisable.

Amateur Public Links Championship:

<sup>\*</sup> Entries close with each Sectional Qualifying Chairman.

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

\*\*\*Walker Cup Match: Men's amateur teams—Great Britain vs. United States.



## **Man-Eating Hazards**

A local rule at the Nyanza Club, Kenya, British East Africa reads, "If a ball comes to rest in dangerous proximity to a hippopotamus or crocodile, another ball may be dropped at a safe distance, no nearer the hole, without penalty."

## **Amendment**

Many golf and country clubs throughout the United States have recently encountered financial difficulties because of real estate tax problems. In California, for example, the problem is so acute that golf clubs and associations there have made it possible that a California constitutional amendment will be voted upon in November. The amendment known as Proposition 6 on California's November 8 ballot, would have the effect of taxing golf clubs on their value as recreational facilities instead of on some higher scale.

The Executive Committee of the United States Golf Association has made the fol-

lowing statement:

The United States Golf Association is cognizant of the difficulties created for many golf and country clubs by real estate assessments which are excessive for the true value of their courses as recreational facilities. The Association notes that some clubs have literally been taxed out of existence.

The Association deplores tax policies which can produce such results. Such policies would seem to be short-sighted and ill-advised for they can lead to denying people the benefits of golf.

Golf is a health-giving, character-build-

ing game with a high standard of sportsmanship. A golf club is an asset to a community as a social center, its green acres have unusual aesthetic values which benefit the club's neighborhood as well as its members. The mere presence of a golf course tends to enhance the value of adjacent property for residential purposes.

Although there is a record number of approximately 6,000 golf courses in the United States today, they are not adequate to serve the interests of the golfing

population.

The USGA Executive Committee wholeheartedly endorses the action of golf associations in California in seeking to have golf courses in their State assessed properly on their value as recreational facilities.

## **Grand Slam Anniversary**

It was 30 years ago on September 27, that Robert T. Jones, Jr., completed the "Grand Slam"—the unparalleled winning of the National Open and Amateur and the British Open and Amateur Championships in a single year.

The feat stands as golf's most remarkable achievement. It also was the crowning act at the end of an illustrious career in competitive golf. Jones retired in November, 1930, soon after completing his

four-championship sweep.

The third championship of this "Impregnable Quadrilateral" came in the U. S. Open, July 10-12, 1930, at the Interlachen Country Club, Minneapolis. Macdonald Smith was Jones' biggest challenger in the final moments of the Cham-

pionship. Smith had almost overtaken the Atianta amateur on the first 13 holes.

The final two holes carried tremendous excitement. Jones, who had pulled into a five-stroke lead after his 68 in the third round, almost lost on the 17th hole. He sliced his drive into a water hazard and took his third five of the round on a par 3 hole.

But, it was exactly the opposite on the 402-yard final hole. Jones reached the front edge in two and sank a 40-foot uphill putt for a birdie three that barred the door for Smith. This gave Jones a two-stroke victory margin.

The final Championship of the "Grand Slam" came September 27, and it was fitting that the great amateur should complete the last leg in the Amateur Championship. Jones won at the same course—the Merion Cricket Club, Ardmore, Pa.—where he had played in his first Amateur in 1916 and also where he had won his first Amateur Championship in 1924. Gene Homans was his victim in the final round by a margin of 8 and 7.

Earlier in 1930, Jones had won the British Amateur, defeating Roger Wethered in the final by 6 and 5, at St. Andrews, and the British Open at Hoylake, England, with 70-72-74-75—291. To add further to his laurels that year, Jones was also Captain of the American Walker Cup team which won, 10-2, over Great Britain.

Jones' performances in National Championships is unsurpassed. Between 1923 and 1930, Jones won 13 major championships—nine here and four in Great Britain

A chart of his major tournament record in those eight years shows the measure of his dominance:

	British Amateur	British Open	United States Amateur	United States Open
19 <b>2</b> 3			Lost, 2nd Rd.	1st, Play-off
1924			1st	2nd
1925			1st	2nd, Play-off
1926	Lost 5th Rd.	1st	2nd	1st
1927		1st	1st	Tie, 11th
1928			1st	2nd, Play-off
1929			Lost, 1st Rd.	1st, Play-off
1930	1st	1st	1st	1st

## **Keeler Course**

A fine old golfing name—Oscar Bane Keeler—will soon appear once again in the world of golf.

The "O. B. Keeler Golf Course" is due to open in Cobb County, Georgia, just north of Atlanta, in the autumn. The 18-hole, par 72 course, was named in honor of the late golf writer for the Atlanta Journal, who died in 1950.

Mr. Keeler covered practically every golfing move made by Robert T. Jones, Jr., from his very introduction to national golf to the Grand Slam of 30 years ago.

## "Golf-O-Rama"

In modern life we have all sorts of "O-Ramas" — "Bowl-O-Ramas," 'Speed-O-Ramas," "Skate-O-Ramas." Now, it seems, there are "Golf-O-Ramas."

The most recent was the Berkshire Hills Golf-O-Rama at the Pittsfield, Mass., Boys Club. The program included shotmaking exhibitions; displays by equipment manufacturers; a talk by William O. Blaney, former Chairman of the USGA's Handicap Procedure Committee; talks on the Rules of Golf by John Hawkins, of the Massachusetts Golf Association, and John English, former Assistant Executive Director of the USGA; a clinic on turf matters by Alexander Radko, Director of the Eastern Region of the USGA Green Section.

Speeches, awards and movies rounded out the program which began at 1 P. M. and ended before midnight.

All proceeds went to the Berkshire Junior Golf Foundation for a scholarship program of turf study at the University of Massachusetts. Two boys already are studying at the University.

More than 400 persons attended the night session and the whole affair was considered a fine success.

## **Course Rating Origins**

The origins of the USGA Course Rating System go far back.

In a recent letter Raynor M. Gardiner, a Boston attorney, traced one of the roots:

"Most people have long since forgotten, and I had almost forgotten myself, that in about 1926 when I was president of the Massachusetts Golf Association, one of our Executive Committee members, Horace Workman, and I invented what

was then called the Massachusetts Golf Course Ratings."

Mr. Gardiner recalled that he and Mr. Workman decided that par was "a very poor" measuring stick so they originated the course rating idea. He added that he felt the only serious mistake made in the beginning was to assume that the scratch golfer invariably got a nice long drive down the middle.

"However, since scratch golfers do not spray their tee shots very often the defect in our original system was not too serious," he said.

For some time two schools of thought had existed. The Massachusetts Golf Association had sponsored the idea of the theoretical scratch golfer against whose performance all courses were to be rated. The Chicago District Golf Association had developed the fractional parmethod of rating courses, based on actual performances recorded for individual holes. Both methods had certain merit, so now these two ideas have been blended together in the new USGA Course Rating System.

## Jail Birdie

Three times Thomas Stovall, 81, has done time at the Federal Correction Institution at Danbury, Conn.

In a way each incarceration was a pleasure and the good game of golf was the reason.

On the first of Mr. Stovall's visits to the Institution, he says he sharpened up his game by playing often on a course at the Correction home. The second visit was equally pleasurable and for the same reason.

By the finish of his third sentence, Mr. Stovall was playing really well.

Now, he has waived a hearing in Chicago on charges of cashing a rubbery \$30 check and requested permission to do his time at Danbury. Little is known about his handicap but by the time he is a free man again, it should be quite low.

## **Amateurs**

Amateur golfers on both sides of the Atlantic Ocean made outstanding bids in the two national open championships—the United States Open and the British Open.

1959 Amateur Champion Jack Nick-

laus finished second with 282 in the U. S. Open, only two strokes behind Arnold Palmer. Amateur Don Cherry finished in a tie for 11th with 284. For company in the tie, Cherry had Ben Hogan and Jerry Barber.

In the British Open there were three amateurs among the top 12. Guy Wolstenholme was sixth with 283, Joe Carr was eighth with 285 and David Blair was 12th with 286. Kel Nagle, of Australia, won with 278.

Nicklaus' finish was the highest in the United States Open by an Amateur since 1933 when John Goodman, then an amateur, won the Championship. Frank Stranahan, at the time an amateur, finished in a tie for second place in the British Open Championship of 1953—the year Ben Hogan won.

## **Big Winners**

Speaking of domination? How are these examples?

Miss Philomena Garvey, of County Louth, Ireland, has won the Irish Ladies' Championship 12 times.

Henri de Lamaze, of France, has won the French Amateur Championship 11 times.

## **Necrology**

It is with deep regret that we record the deaths of:

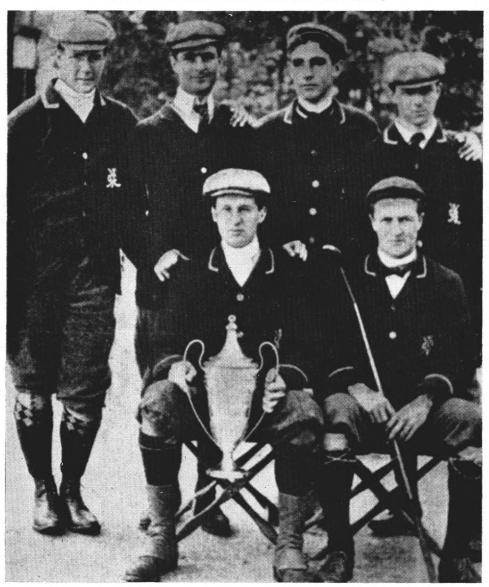
Mrs. Genevieve Hecker Stout, of New York, winner of both the USGA Women's Amateur and Metropolitan Women's Amateur Championships in 1901 and 1902. She won the Metropolitan title again in 1905 and 1906.

**Keith Conway**, of Atlanta, member of the USGA Sectional Affairs Committee since 1938. He was past president of the Atlanta Golf Association and vice president and director of the Georgia Golf Association.

## **Books**

Golf for Women by Louise Suggs assisted by six other women professionals (Rutledge Books, \$3.95). Each professional contributed at least one chapter on a phase of play. Much of the text is in the form of giving a lesson. There are several hundred pictures. Other contributors: Marlene Bauer Hagge, Beverly Hanson, Jackie Pung, Barbara Romack, Joyce Ziske and Ruth Jessen.

## FIRST INTERCOLLEGIATE CHAMPIONS



Solomon A. Smith, now a Chicago banker, visited "Golf House" and presented this picture of the Yale University Golf Team of 1897 which won the first intercollegiate golf championship. Teams from Yale, Harvard, Princeton and Columbia competed. The historic picture shows John Reid, Jr., son of the founder of St. Andrews Golf Club, Yonkers, N. Y., who was one of the very earliest figures in American golf. W. B. Smith, standing on the left, brother of the donor of the picture, was runner-up to the late Findlay S. Douglas in the Amateur Championship of 1898. Standing: W. B. Smith, Craig Colgate, Reid, Solomon Smith. Seated Roderick Terry, Jr., W. Rosseter Betts.

## GOLF THE MOTHER TONGUE FOR WORLD TEAM EVENT

JOSEPH C. DEY, JR. USGA Executive Director

If you were asked to serve as a rules official in the World Amateur Golf Team Championship, your first fearful impulse might be to rush for the aid of interpreters: there were to be teams of 33 countries in the Championship late this month at the Merion Golf Club, in the Philadelphia suburbs.

Similar fears had arisen before the first World Championship at St. Andrews, Scotland, in October, 1958. Some officials, linguistically limited to English, visualized being called out to a remote corner of The Loop on the Old Course, perhaps to answer a Far Eastern competitor's questions about the technicalities of obtaining relief from an artificial obstruction.

But all such fears were baseless. All the players spoke Golf, incidentally using English, and they all were animated by the spirit of Golf. A shank is a shank in Malaya as well as at Merion.

To the surprise of no one, at St. Andrews the players, many coming together for the first time, re-discovered the unity of golfers bound to common ideals. Therein was seen a glimmering of the unity intended for mankind.

This, then, is the real significance of the second World Amateur Team Championship at Merion this month. It is as the inscription on the Eisenhower Trophy hopefully proclaims:

To Foster Friendship and Sportsmanship Among the Peoples of the World

The Championship is for the Eisenhower Trophy, but there is a side event which is fully as expressive of the spirit of the occasion. The side event is for the Delegates and Duffers Cup, open to officials, non-playing captains and guests; it is being held at the Gulph Mills Golf Club before the Championship proper.

A suggestion by President Eisenhower led to the Delegates and Duffers competition. When the Championship Planning Conference was held at Washington in



The Eisenhower Trophy

May, 1958, the President received the delegates at the White House and said in part:

"I suggest, aside from the four hot-shot golfers you bring, that you take along some high-handicap fellows and let them play at their full handicap . . . This way golf doesn't become so important. After a match the scratch fellow remembers one thing . . . and tells all his friends for the rest of his life that he could have won that international match if he hadn't hit the ball into the water on the 16th. But the high handicappers know darn well there's no use telling their families or their friends about their golf, so they will talk more about St. Andrews, and about the wonderful Scotch people, and everybody they met there."

This prompted Gabriel Tudela, President of the National Golf Commission of Peru, to propose a "Delegates and Duffers

Cup" event for officials and non-playing captains. When Seymour Marvin, Brazil's non-playing Captain, accepted the Delegates and Duffers Cup as first winner at St. Andrews, he said: "We came not with the expectation of winning (the Championship) but rather to contribute what we could to the occasion merely by being present."

## How It All Came About

The World Amateur Golf Council and its Championship are traceable to a suggestion for a team match between high-handicap players of Japan and the United States; it flowered into something totally different. The chronology of unfoldment was remarkable. The three main stages occurred in Asia, North America and Europe. Reduced to six brief scenes, this is how it came about:

Scene 1—Tokyo; October, 1957: During the Canada Cup international professional event, Japanese golf-lovers asked Juan T. Trippe, New York businessman and long-time golf devotee, to inquire whether the United States Golf Association would be willing to sponsor a team of high-handicap amateurs for a match

with Japan.

Scene 2—New York; November, 1957: Mr. Trippe delivered the Japanese message to a USGA official, who saw no prospect of USGA sponsorship of a team of high handicappers. However, the USGA official suggested a competition which could bring together the best players of all countries and accommodate all possible interests. (The USGA had been receiving invitations for matches periodically from other countries and could not accept them. Also, the USGA had been asked to try to have golf included in the Olympics.)

Scene 3—Chicago; January 23, 1958: The USGA Executive Committee approved in principle a plan for a World Amateur Team Championship, and decided to seek the cooperation of the Royal and Ancient Golf Club of St. An-

drews, Scotland.

Scene 4—St. Andrews; March 6-8, 1958: USGA representatives John D. Ames, President, and Joseph C. Dey, Jr., Executive Director, made a confidential flying mission to St. Andrews, presented the plan to the R. and A.'s General Committee, and proposed St. Andrews as the scene of the first Championship later in



Totton P. Heffelfinger of Minneapolis, Minn., will be the Non-Playing Captain of the United States Team. Mr. Heffelfinger was USGA President in 1952-53.

the year. The R. and A. cooperated to the full, led by Henry H. Turcan, Chairman of the General Committee; N. C. Selway, Chairman of the Championship Committee, and Brig. Eric Brickman, Secretary.

Scene 5—Washington; May 2-3, 1958: After invitations from the USGA-R. and A. Interim Committee had gone to every country in the world, 39 gentlemen representing national amateur golf associations in 35 countries met in Washington; airplane transportation was provided by American friends of golf. They created the World Amateur Golf Council, with 32 original Member Organizations, and planned the first Championship. President Eisenhower received the delegates in the

Rose Garden of the White House on May 2, and consented to a request that the Championship prize be known as the Eisenhower Trophy; it was given anonymously by present and former USGA officials.

Scene 6—St. Andrews; October 8-11 and 13, 1958: The first Championship was held, with teams from 29 countries. Australia was the Champion after an 18-hole play-off of a tie with the United States, 222 to 224, best three out of four scores. Birdie 3s on the home green by Captain Robert Stevens and Bruce Dev-

lin constituted Australia's winning margin. The other members of the Australian team were Peter Toogood and Douglas Bachli. The American side comprised Charles R. Coe, William Hyndman, III, William J. Patton and Dr. Frank M. Taylor, Jr., with Robert T. Jones, Jr., as Non-Playing Captain. In the 72-hole Championship proper Australia and the United States tied at 918, the best three out of four scores in each round counting. Great Britain and Ireland was third with 919 and New Zealand fourth with 911

## DO YOU KNOW YOUR GOLF?

Here is a golf competition in which there's no waiting on the first tee, you play as you sit, use a pencil instead of clubs, and a round can be played indoors at night.

But you need to know something about the Rules of Golf, etiquette, definitions, history and records of the game.

The answers for the questions are given on Page 20.

- 1. Who is the only male golfer to represent the United States in international team competition with Great Britain both as an amateur and as a professional? Can you also name the years he represented the United States.
- 2. Who is the only Briton to play against the United States as an amateur and as a professional? Can you also name the years he represented Britain?
- 3. Which player participated in an amateur international competition for Britain and a professional international competition for the United States? Can you also name the years?
- 4. During a round may a player carrying fewer than 14 clubs add as many clubs as will bring his total to the legal limit of 14?
- 5. In what year and on what course was the United States' only loss in Walker Cup matches?
- 6. What is the penalty if a player uses an artificial device for measuring or gauging distance or conditions which might affect his play?

- 7. Name six trophy competitions competed for internationally by golfers.
- 8. What is meant by "Equipment" in the Rules of Golf?
- 9. Which victory in the National Open Championship has often been called "The Miracle Victory?" Why has it been so called?
- 10. In post World War II playings of the Open Championship what has been the best showing by an amateur?
- 11. What is the largest margin by which one player can defeat another in an 18-hole match play round?
- 12. What is the proper procedure for dropping and what is the penalty if the ball comes to rest against the player?
- 13. In four-ball match play if a player's ball moves another's ball, is there any penalty?
- 14. In four-ball match play if a player's ball knocks another player's ball into the hole, has the owner of the moved ball holed out?
- 15. In singles match play if a player's ball moves his opponent's ball, must the opponent replace his ball?
- 16. Approximately how many golf courses are there now in the United States?
- 17. What is the oldest national golf championship in the United States? In which year was it first held?
- 18. Can a player take a practice stroke (with a ball) during the play of a hole?

# CAROL SORENSON WINS GIRLS' JUNIOR CHAMPIONSHIP

Plays 109 Holes at Tulsa

**D**estiny is defined in the dictionary as "the predetermined course of events often conceived as a resistless power or agency."

While Carol Sorenson's bold, attacking style of golf truly earned victory in the 1960 USGA Girls' Junior Championship, it seemed several times that destiny may

have been at her side.

The maximum number of holes, including the qualifying round, expected in a Girls' Junior Championship is 108. But, Miss Sorenson played 109 at The Oaks Country Club, Tulsa, Oklahoma, site of the 1960 playing. The route of the 17-year old thereby became the longest—and one of the toughest—for any champion in the 12-year history of the Girls' Junior.

Only once during the entire Championship did Miss Sorenson fail to play to the 18th green. This occasion came in the final round when she won her match with Miss Sharon Fladoos, 17, of Du-

buque, Iowa, by 2 and 1.

The 109-hole total includes an 18-hole qualifying round, three matches which went the distance, a 20th hole victory in the third round over 13-year old Roberta Anne Albers, plus the final against Miss Fladoos.

Defending Champion Judy Rand and Miss Sorenson were co-medalists, in the qualifying round, with one-under-par 76s.

There were several times when it appeared that Miss Sorenson's opponents had the best of her, but each time she came back. The most notable example of this came in Miss Sorenson's semi-final match with 15-year-old Judy Torluemke, of St. Louis, Mo., low amateur in the 1960 Women's Open Championship.

Miss Sorenson was one up after six holes but then three-putted two out of the next three to lose all three and find herself two down at the turn.

Miss Torluemke looked unbeatable after winning the 148-yard 11th with a birdie two to assume a three up margin



Carol Sorenson, 1960 Girls' Junior Champion, accepts congratulations from Runner-up Sharon Fladoos while John M. Winters, Jr., USGA Vice-President and Mrs. John Pennington, Chairman of the USGA Girls' Junior Committee look on.

and she carried it through the 13th hole.

In retrospect, it appears that destiny stepped up to Miss Sorenson's side on the 14th tee where it looked as if she was hopelessly beaten. Miss Sorenson proceeded to win the next four holes in a row to assume a one up lead on the 17th hole and halve the final hole to win one up. Over that four-hole route on which par is 3-4-5-5, Miss Sorenson went 3-4-4-4.

Another example came in the final match against Miss Fladoos on the tough 454-yard 16th hole where there is a green with a sharp downhill slope. Holding only a slim, one up lead at this point, Miss Sorenson found herself about 20 feet short of the green on her third shot while Miss Fladoos had dropped her third shot on the green 16 feet from the pin. Miss Sorenson's wedge shot stopped 11 feet short and it seemed at this point that the match would be all even going to the 17th tee.

Miss Fladoos' first putt was short by two feet. Here is where destiny may have appeared again. Miss Sorenson stepped up and dropped her 11-footer. Then Miss Fladoos who had been putting magnificently all week, sadly saw her twofooter lip the cup. She three-putted for a six and was two down.

This was the all-important hole in the final match. Miss Sorenson appeared surely to be losing the hole and would have been all even; but instead she won and was two up.

In her opening round match with Nancy Jean Way, of Grand Rapids, Mich., Miss Sorenson saw her four-hole lead, after 13 holes, melt after losing holes No. 14-15-16. But, Miss Sorenson didn't buckle; instead she birdied the 18th hole for her two up margin.

Against Jeannie Thompson, of Tulsa, Okla., in the second round, Miss Sorenson lost the last three holes of the front side and was one down. Miss Thompson went two up on No. 10 before Miss Sorenson won three of the next five holes for a one up victory. Was destiny with Miss Sorenson?

Miss Sorenson was playing in only her second USGA Girls' Junior Championship. She was a semi-finalist in 1959 at the Manor Country Club, Norbeck, Md., before bowing to Miss Marcia G. Hamilton, of Evansville, Ind., one up.

First starting golf at the age of six, the refreshing, mild-mannered daughter of a Janesville. Wis., school teacher has come a long way. She is the Wisconsin Women's Amateur Champion, for the second year in a row. She was medalist and won the Women's Western Junior Championship in 1959, plus the Wisconsin Junior Championship in 1956 and 1958.

The other finalist. Miss Fladoos. similarly played outstanding golf throughout the Championship. Her path to the finals was easier. She defeated Miss Margaret Jones, of Fort Mitchell, Ky., 7 and 6 in the first round; Miss Sue Jennett, 4 and 3, in the second round; Miss Sandra Haynie, of Austin, Texas, two up in the third round; and Miss Ann Baker, of Maryville, Tenn., 3 and 2, in the semifinals, before bowing to Miss Sorenson in the finals.

One of the feature matches of the tournament was the Fladoos-Haynie battle.

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Massachusetts State Golf Association
New England Golf Association
New Hampshire State Golf Association Rhode Island State Golf Association Vermont State Golf Association Bernard H. Ridder, Jr., St. Paul, Minn. J. H. Watson, Marietta, Ohio

Miss Haynie had thwarted Miss Rand's hopes of becoming a repeat winner of the Girls' Junior in the second round by a two up margin. Misses Fladoos and Haynie were all even after 15 holes before Miss Fladoos birdied Nos. 16 and 18 for a two up margin. Miss Fladoos' game was marked by accuracy off the tee and fine putting.

An incident came in the third round involving Miss Torluemke. She was in a small bunker behind the 13th green and was seen to be apparently sweeping sand out of the front edge. When Mrs. John Pennington, Chairman of the USGA Girls' Junior Committee went over, she saw that Miss Torluemke was simply trying to lift out a live snake. When she finally succeeded in getting it out, Mrs. Pennington proceeded to step on and kill the snake. In spite of this fright, Miss Torluemke calmly blasted her ball out and it landed right next to the pin.

18-hole stroke play consolation An event was held at the Southern Hills Country Club, in Tulsa for first round losers. The winner was Jane Bostrom with a score of 79.

The tournament was a grand success and The Oaks Country Club, especially General Chairman Marian Askew and Mrs. Carl Hotz, were gracious hosts for the event. Mr. John Winters, Vice President of the USGA was on hand to referee the final match and present the awards.

## N. C. MORRIS, ELDER STATESMAN OF GOLF

RALPH MOORE Denver Post Golf Writer

When Newton Cleveland Morris celebrated his 73rd birthday last September, Denver's "Mr. Golf" figured he was exactly "one over par." Golf and N. C. Morris are synonymous.

Morris, known since his collegian days at Colorado College as "Tub," is currently logging his 41st year as a regional golf

official.

In 1919 he was elected Secretary-Treasurer of the Colorado Golf Association and has been associated with the conduct of every major tournament held in Colorado since.

In 1939 he became the USGA's Sectional Affairs committeeman in Colorado. He now serves on both the Public Links and the Senior Championship Committees. When the first player teed off in the 1959 Public Links Championship at Denver's Wellshire municipal golf course, it marked a unique distinction for Tub.

Through Mr. Morris' efforts it was the first time the tournament was played on

the same course twice.

Mr. Morris first attempted to bring the Public Links Championship to Denver in 1942. World War II, however, prevented this. The USGA Championships were postponed until 1946 and Wellshire was the site of the post-war Public Links renewel.

Mr. Morris, a late convert to golf despite his tenure, has contributed immeasurably

to the sport in Colorado.

Since 1919 he has annually conducted or been associated with at least seven city and state tournaments. Without his unwavering devotion the game would not have attained the stature it now enjoys in Colorado.

The USGA has been particularly favorable to Colorado recently. The Public Links was played in Denver July, 1959, the National Amateur was held at the Broadmoor course in Colorado Springs last September, and the 60th National Open was played at the Cherry Hills Country Club, Denver, this year, in June. In 1962 the Curtis Cup Match will be played at Broadmoor.



N. C. Morris

Mr. Morris also assisted in bringing the touring pros back to Denver in 1958 after a ten-year absence.

Tub helped pull golf through some thin years. Striving for municipal and private course interests. Any attempt here to "sweeten" the account would not be in character with Tub.

He is a rare person, not given to lavish praise or vindictive criticism. He is rare in another aspect, too—a native Denverite.

Born September 28, 1886, Tub attended Denver pubic schools, graduating from West High School in 1905.

He started his formal sports career as a West "Cowboy," lettering in football, baseball and track for four years.

It wasn't until after his collegiate days at Colorado College in Colorado Springs that he took a golf club in his hands. In fact, he once razzed his CC football coach for playing "an old ladies' game" because the coach relaxed on the links.

After being graduated in 1909 with degrees in history and economics, Mr. Morris launched a 41-year teaching career beginning at Rocky Ford High School and terminating when he retired from classroom duties at West in 1950.

It was at West that Tub first came into prominence as a sports leader. In 25 years of coaching his Cowboy prepsters won seven championships in football, a like number in basketball and three in baseball.

He rates his 1930 Cowboy nine as the "best high school baseball team I've ever seen"

That year Morris' boys played only one complete, nine-inning game, because of a league rule that terminated a contest when one team had a ten-run advantage. North's Vikings extended West and forced the Cowboys to play nine full innings before West won the championship game.

This was the type of team that appealed to Tub. Close them out as soon as possible. It was sound advice in baseball and although he didn't know it then, he was to carry out that same mercy killing theory in golf.

While a student at Colorado College he played four years at fullback, four as an outfielder and four years as a field man in track.

Tub threw a block on a momentous day in 1906 at Folsom Field in Boulder, Colo., when CC's quarterback, Harry Fisher, passed to end Herb Sinton for a touchdown and the CC Tigers defeated Colorado University 6-0. CC's offense? The "T" formation.

Gus Dorais and Knute Rockne, who put Notre Dame in the nation's sports limelight with aerial proficiency, weren't to popularize the forward pass until 1913 when the Irish defeated Army 35-13.

Through four seasons as a Tiger fly chaser Tub didn't make an error until the final game of his senior year. And that bobble didn't have any affect on the outcome—CC won handily.

Still, Tub feels that single miscue spoiled a four-year personal goal. He can't forget it even now.

It wasn't until after he came to West High School in January of 1915 that Mr. Morris was pushed into his first golf game.

Charlie Sedgewicke, a sports shop manager, persuaded Tub to try the game. Tub

was a Sedgewicke customer and friend and in a "weak moment," gave golf a try. He played his first rounds at City Park, then an eight-hole course.

Three years later Tub was runner-up in the Colorado State Amateur championship.

By 1924 he was one of the Centennial State's foremost amateurs. That year he won both the Denver and the State titles. In 1927 he reclaimed the Colorado trophy.

One of Tub's greatest thrills came in 1928 when he defeated Harry Strassburger, a Coffeyville, Kansas haberdasher, for the Broadmoor Hotel's Invitational Championship.

Strassburger was one down to Tub going into the 12th hole of the tricky mountain course.

Strassburger hit his drive straight down the middle on the 12th, while Tub's errant tee shot trickled off the fairway into deep rough. The Kansan, hitting first, put his second shot less than four feet from the pin on the par four hole and it appeared he would even the match here.

But Tub, after surveying the situation, decided a bold shot was necessary. He ruled out the safe punch shot back to the fairway and took a four-wood from his amazed caddie.

Wise galleryites shook their heads. Strassburger's followers smiled. Tub's fans stared in disbelief.

All were even more shaken when Tub laced his shot straight for the pin, the ball flying out of the pesky long hair and rolling inside Strassburger's pin-high position.

The clothier proceeded to two-putt and Tub's birdie climax won the hole. Tub had the tailor neatly sewn up.

Other tournaments and other shots have dotted Tub's career, but his performance on the 12th that day tops them all.

Other honors have come to Tub, too. He has held an office with the Denver Golf Association since 1922 and has been a director in the Trans-Mississippi Golf Association since 1928.

Tub suffered a stroke early in 1959 and his clubs—except for putter—lie idle. Still Tub found the strength to accept a chore with the 1959 Public Links committee. It was closer to his heart than medicine.

# NORTHWEST PRODUCES ANOTHER JUNIOR CHAMPION

Ву

ROBERT C.
RENNER
USGA Tournament
Relations Manager

The golfing Northwest has turned out a stream of top caliber amateur golfers through the years. During the recent Junior Amateur Championship the Northwest again produced a winner.

When William L. Tindall, of Seattle, Wash., scored a 2 and 1 victory in the final match at the Milburn Golf and Country Club, Overland Park, Kansas, it marked the first time in Junior Amateur history that Champions had come from the same state in successive years.

Tindall, 17 years old, followed fellow-Washingtonian, Larry J. Lee, of Spokane. Lee, who had passed the age limit and was ineligible to defend, won the 1959 Championship at the Stanford University Golf Course near San Francisco.

This was not the only record established during the Championship, played August 3-6. The entry of 1,445 started things off in record fashion, topping by 80 the previous mark of 1,365 set in 1959. This record entry was reduced to the 128 qualifiers through Sectional Qualifying Rounds at 51 locations.

Another Junior record was the first round match which went 10 extra holes before Michael Eiserman, of Independence, Mo., defeated Patrick Honeycutt, of Memphis, Tenn., one up. This also equaled the longest overtime match in the history of the USGA—the 28-hole affair between Maurice McCarthy and George Von Elm in the 1930 USGA Amateur Championship at the Merion Cricket Club, Ardmore, Pa. McCarthy was the one up victor.

A sudden thunderstorm interrupted the play of Eiserman and Honeycutt after the 20th hole on Wednesday evening and they resumed on the 21st hole Thursday morning. As Eiserman also went on to win his second and third round matches on Thursday, by margins of 2 and 1 and one up, he was thus required to play 43 holes of Championship golf in a single day.

The semi-final results marked the first

## THE BALLADE OF THE INCOMPETENT GOLFER

By W. Fairbanks

I am not ambitious at all:
I am not a golfer, I know:
But I do love to drive a long ball,
Though with an unorthodox blow.
My swing is uncertain (not slow);
I am not expert with my tools;
I lack the St. Andrews argot—
But I hope I have kept to the rules!

When your skill is undoubtedly small, 'Tis hard, sir, to hit in a row Some five or six drives, and not fall Down hard at least once to your woe. But putting is easier—though A short one my confidence cools. My game is deficient in go, But I hope I have kept to the rules!

Unable to fly, let me crawl;
Your sympathy kindly bestow.
I am not a Vardon or Ball;
I am not a Travis or Low;
I am not desirous—oh no!—
To rise from the ranks of the fools,
To shine with Braid, Douglas, and Co.—
But I hope I have kept to the rules!

Dear sir, though my standard is low, Unworthy of all the best schools, My form and my style are so so;— But I hope I have kept to the rules!

time that both matches had gone extra holes in the Junior Amateur. One match went 19 holes, the other went 20 holes.

Another record was equaled when Robert Kirouac, of Sharon, Mass., qualified for his fifth Junior Amateur, thus joining Jack Nicklaus, of Columbus, Ohioand John P. Konsek, of Buffalo, N. Y., as the only others to qualify in so many Juniors. Nicklaus and Konsek were members of the 1960 Americas Cup Team.

Tindall had anything but an easy path to the title. He started off with a one up victory in the first round over John Einhorn, of San Diego, Calif. Along the way he won from Claude Harmon, Jr., son of the professional at Winged Foot, Mamaroneck, N. Y., by another one up margin.

The semi-finals had Tindall playing against Bruce Fischer, a 15 year old from Manning, Iowa, while Robert (Laurie)



Harry L. Givan, Charman of the USGA Junior Championship Committee, is surrounded by semi-finalists of the 1960 Tournament. Front row, from the left: Robert L. Hammer, Runner-up; Givan; William Tindall, Champion. Back row, from the left: Sherman Finger, III, Semi-finalist; Bruce Fischer, Semi-finalist.

Hammer, a blond-haired 17 year old lad from Sarasota, Fla., met Sherman Finger, III, 16 years old and a quarterback on Evanston (Ill.) High School's football team

The other semi-final match went 20 holes before Hammer chipped in from 15 feet off the green for a birdie four on the 561-yard hole.

Tindall and Hammer showed the strain of the weather and the Championship in the final round. Both seemed tired and the temperature was 100 degrees.

Tindall jumped off to a lead on the first hole although both had experienced tree trouble due to bad drives.

Both had opportunities on the next four holes but neither could capitalize.

On the 168-yard sixth hole, Hammer sent his tee shot 13 feet past the pin and two-putted for his par while Tindall was short, chipped up eight feet past, and missed. This evened the match but Hammer moved into the lead on the next hole when he sank a six-footer for a par five

while Tindall needed six. Pars on the eighth and ninth holes kept Hammer's margin at one up, Tindall going out in 39 and Hammer in 38.

The 11th hole was a key to Tindall's victory. It was on this 392-yard hole, with a sloping green, that Tindall holed a tremendous 61-foot putt for a birdie three that pulled him even with Hammer when it looked as if they would halve the hole.

Another long putt earned Tindall the 15th hole, and he increased his lead to two up on the 16th hole, but only after both players encountered considerable difficulty. The hole is a par four, 331 yards long, but it is tree-lined and well trapped. Both hit into the trees off the tree and their second shots missed the green. Hammer blasted out of a trap and hit the flagstick, but bounced seven feet away. Tindall then saw his chip shot lip the cup and roll two feet past. Hammer just missed his seven-footer while Tindall sank his putt.

The 17th almost proved to be Tindall's

downfall. A faulty tee shot was nearly disastrous as it hit a big tree 125 yards down the fairway and dropped, while Hammer's drive was straight down the middle. However, Tindall proved his Championship caliber here as he hit a powerful six-iron third shot, landed 12 feet from the cup on the 488yard hole. Hammer's third shot ran to the back edge of the green and he took two putts to get down for his five. Tindall did likewise to end the match on the 17th hole.

Tindall's victory was certainly no surprise as he has an outstanding record. He was the 1959 Washington State Junior Chamber of Commerce Champion and was both the Seattle City Amateur and City Junior Champion in 1958. In addition, he is the 1960 Washington State Hearst Champion. In his only previous appearance in the Junior Amateur in 1958, Tindall lost in the first round by a 3 and 1 margin to William G. Lovett, of Port-

land, Oregon.

Both Tindall and Hammer will be ineligible in 1961 because they will be over the age limit but the other two semifinalists will be eligible. Fischer is only 15 and Finger is 16 years old.

The Milburn members were exceptional hosts for the Championship as they went out of their way to make the boys feel at home. As a matter of point, most of the players were housed in members' homes and were entertained during the entire tournament. One of the pre-tournament highlights was a pool-side dance.

Sam C. Sparks, the General Chairman of the Championship, and Marty Purcell, president of Milburn, deserve special praise for their all out effort to make the Championship a success. Similarly, the work of Dan A. MacDougall, a member of the USGA Junior Committee from Kansas City, was highly instrumental in the successful outcome of the tournament.

## 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. Booklet 25 cents (special rates for quantity orders, more than 500).

USGA GOLF HANDICAP SYSTEM FOR MEN, containing recommendations for computing USGA Handicap and for rating courses. Booklet 25 cents. USGA Slide Rule Handicapper, 25 cents. Poster 15 cents.

THE CONDUCT OF WOMEN'S GOLF, containing suggestions for guidance in the conduct of women's golf in clubs and associations, including tournament procedure, handicapping and course rating. 35 cents. USGA Slide Rule Handicapper, 25 cents. Poster 15 cents.

COURSE RATING REPORT, a form for rating a course hole by hole; for association use, size  $4\frac{1}{4} \times 7$  inches. 10 cents, \$7.50 per 100.

COURSE RATING POSTER for certifying hole by hole ratings to a club; for association use, size 8½ x 11 inches. 5 cents. \$3.50 per 100.

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.

PREPARING THE COURSE FOR A COMPETITION, a reprint of a USGA Journal article. No charge.

FIRE PROTECTION—GOLF CLUB PROPERTIES, reprint of a USGA Journal article by T. Seddon Duke. No charge.

PROTECTION OF PERSONS AGAINST LIGHT-NING ON GOLF COURSES, a poster. No charge. HOLE-IN-ONE Awards. No charge.

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A JUNIOR GOLF PROGRAM FOR YOUR CLUB AND DISTRICT, a 16-page booklet on organizing and developing junior golf programs at different levels by the USGA Junior Championship Committee. No charge.

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

USGA CHAMPIONSHIP RECORD BOOK. Detailed results of all USGA competitions since their start in 1895. \$2.

USGA JOURNAL AND TURF MANAGEMENT, a 33-page magazine published seven times a year. \$2 a year.

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

## SUSPENSE, FINE GOLF, GOODWILL IN AMERICAS CUP

United States Wins Fifth Biennial Match

The nature of the game of golf is such that a competition can suddenly broaden to include more than fine shotmaking and sportsmanship.

The fifth biennial Americas Cup Matches played at the Ottawa Hunt and Golf Club, Ottawa, Canada, August 11-12, was that kind of a competition.

Foremost among the added ingredients was the outstanding rally the United States team produced to win the Americas Cup. The final point count was: United States 21½, Canada 20, Mexico 12½.

At lunch on the first day the United States had only one point to show for a morning of three-ball sixsome play. The point came on the 4 and 3 victory by Dr. Frank M. Taylor, Pomona, Calif., and John Konsek, Buffalo, N. Y., over Mexico's Roberto Halpern and Tomas Lehmann.

By that evening the United States team had shifted into full rally and pulled into second place behind the Canadians.

During the second day the United States team could not move into the lead until the next-to-last singles. In that one, Don Cherry, Wichita Falls, Texas, defeated Bob Wylie, Canada, 2 and 1, and Hector Alvarez, Mexico, 3 and 1.

The United States held on tightly and by the evening of the final day the United States team was the victor by the narrow and thrilling margin.

The four previous Americas Cup Matches also were won by the United States Team.

Of great interest, even if the incident was unfortunate, was the loss by penalty of five holes by Jack Nicklaus, Columbus, Ohio, the National Amateur Champion, and Deane Beman, Silver Spring, Md., the 1959 British Amateur Champion. The cause was the finding of 15 clubs in Mr. Beman's bag—an extra wedge having gotten there without his knowledge. He called the penalty on himself.

The American pair made a bold bid to overcome the heavy penalty but the job

## NEW MEMBERS OF THE USGA REGULAR

Hillerort Colf & Country Club

A 1 ~

Ala.	Hillcrest Golf & Country Club
Ala.	Indian Hills Country Club
Ark.	Russeliville Country Club
Calif.	China Lake Country Club
Calif.	Liano Golf Association
Calif.	Skylinks Men's Golf Club
Calif.	Turiock Golf & Country Club
Del.	Cavaliers of Delaware
	Cleveland Heights Golf & Country
Fla.	Club
Ga.	Okefenokee Golf Club
111.	Greater Alton Golfers' Assn.
111.	Greenville Country Cub
III.	Meadow Woods Country Club
111.	Pickwick Golf Club
111.	Soangetaha Country Club
E11.	Sulivan Country Club
Ind.	Bloomington Country Club
Ind.	Rea Park Men's Club
Kans.	Chanute Country Club
Ky.	Harmony Landing Country Club
Κý.	Hazard Golf Club
Mass.	Pymouth Country Club
Mass.	Rockport Golf Club
Mo.	Mirror Lake Golf & Country Club
Mont.	Kalispell Golf Association
Neb.	Hilltop Country Club
Neb.	Wayside Country Club
N. J.	River Vale Golf Club
N. Y.	Beliport Golf Club
N. Y. N. Y.	Pleasantville Country Club
N. Y.	Sprain Valley Golf Club
Ohio	Coldstream Country Club
Ohio	Rawiga Country Club
Ohio	Skyline Golf Club
Pa.	Willowbrook Country Club
Tenn.	Town and Country Golf Club
Texas	Buckingham Country Club
Texas	Eagle Lake Recreation Center
Va.	Millwood Country Club
Va.	White Oaks Country Club
Wash.	Kelso Elks Club Men's Golf Assn.
W. Va.	
Wis.	Luck Country Club
Wis.	Rhinelander Country Club

### **ASSOCIATE**

Fla.	Atlantis Country Club
Fia.	Rockledge Golf & Country Club
Fla.	Sombrero Yacht & Golf Club
Minn.	Pokegama Country Club
N. Y.	Latta Lea Golf Course
Ohio	Swaim Fields Golf Club

was too large and the Mexicans, Mauricio Urdaneta and Rafel Quiroz won 4 and 3.

Two youngsters, Mr. Nicklaus, of the United States, and Gary Cowan, of Canada, set very fast paces and gave indications of golf in the years ahead.

One of the finest rounds of golf played during any Americas Cup match was the

## VICTORIOUS AMERICAS CUP TEAM



United States Team members, winners of the Fifth Americas Cup Match held at the Ottawa hunt and Golf Club, Ottawa, Canada, August 11-12. From the left: Deane R. Beman; Dr. Frank M. Taylor, Jr.; John Konsek; William Hyndman, III, Captain; Charles R. Coe; Donald R. Cherry; Jack W. Nicklaus.

approximate 65—eight under par—shot by Mr. Nicklaus during the first afternoon singles play. He is only 20 years old.

Individual honors after the two days of play went to Mr. Cowan who by himself or with a partner, won 6½ out of eight possible points. He had three victories and one tie in four singles. With Phil Brownlee he won three sixsomes. He is only 21.

A generous portion of goodwill was accumulated at Ottawa, but actually that is not news. Americas Cup matches always seem to have much goodwill among players, officials and galleries.

The United States Captain, William Hyndman, III, Huntingdon Valley, Pa., led a team of proven players. Veteran internationalists in the group were: Mr. Hyndman; Charles R. Coe, Oklahoma City; Mr. Cherry; Mr. Beman; Mr. Nicklaus; Dr. Taylor. A newcomer to international golf was Mr. Konsek.

The Ottawa Hunt and Golf Club was a fine site for the match and there was

quite a round of entertainment for players and officials given by the club, the Royal Canadian Golf Association and members of the diplomatic colony in the Canadian Capital city.

Present at the flag raising ceremony were: the Mexican Ambassador to Canada, His Excellency Rafael de la Colina; Willis C. Armstrong, United States Deputy Chief of Mission to Canada; V. C. Holdroyd, President, Royal Canadian Golf Association; James P. Anglin, Past President, Royal Canadian Golf Association, and R. M. Johnson, General Chairman for the Ottawa Hunt and Golf Club.

Others whose presence added so much to the occasion were: Rodolfo Patron, President, Asociacion Mexicana de Golf; Rodrigo Medellin, Captain of the Mexican Team and E. Duncan Millican, Captain, Canadian Team.

The USGA was represented by John G. Clock, President; Clarence W. Benedict, Vice-President; Bernard H. Ridder, Treasurer, and A. Vinton Stegeman, Jr., member of the Executive Committee.

# GOLF BALL FINDING BY GREAT LADY OF THE GAME

By MISS MARGARET CURTIS

Women's Amateur Champion, 1907-11-12

There is a "side-show" to golf that can be very good fun—ball finding! And it can serve several good turns.

We have a Veterans Mental Hospital near Manchester, Mass., where a group of us helped to create a very popular and useful driving range. The authorities say that as the men don't do more than "swipe" the ball, they can use those that are so bad no one could play with them. So, they usually get between 200 and 300 a season from me.

Then we have Girl Scouts and Legion sales where the next better balls sell very well. Then come my buddies and myself.

My routine is to go down to the Essex County Club, Manchester, about dawn on Sunday mornings—also at other times when there is a tournament on. There are two instruments that I find very helpful to find and get balls with, in fact, I might say indispensable. A stick to swish the tall grass and bushes is one. I use an old headless steel shaft. The other—a retrieve-it, meant, of course, for scooping out balls from brooks and ponds—which I use even when I'm not going near any water. I scoop into undergrowth and it saves me from briar and poison ivy!

I leave the pond to the caddies—they evidently have heard that I do things with the balls I find, for last summer two of them, at different times, offered me some they had found—which pleased me.

A year or two ago I became conscious that I was finding a lot of balls I'd never heard of, so I put them in a special basket. I've asked many golfers to guess how many different makes I'd found—the usual answer is around 30—actually last summer it was 132—with many funny names mostly misspelled.

The queerest to me—"Square"—who would want to try to play with a square ball?

There are certain tricks of the trade of finding balls that one learns. It ap-

## Balls Found in 1959 Included:

Nassau

Air Flite A.M.C. Jimmy Crane A.M.C. Square Armstrong Tires Atomic Autograph Bedford Bel Aire Ben Hogan Blue Diamond Bob Toski **British Comet** Bromford Championship Clix Tru Test Club Special Custom Danny Morgan Don Fairfield Dot Doubleduty 75 Dyna Flite Eagle Eastern Air Route Fairway Field ĞPO Fifty Finalist First Flight Flag Hi Floater Swan Flying K Frisque Special Gold Comet Gold Cup Golfcraft Golf-rite Grand Slam Powersinc Greenway Hol Hi J. C. Higgins J. Homan J. Lloyd a Gutta Percha ball Jack Burke Jerry Barber Jet 707 Johnny Palmer K. 28 Lady Burke Lady Spalding Lake Sunapee Les Strokes Longwear Master Maxfli Max Tuf Meteor Middlecoff

Mike Souchak Mike Turnesa

Vin Gorham

Mustang White Power

Monogram

Nike Olympic Ould Newbury Palmer Par 72 Par King Par Maker Phil Friel Pin-Hi Plastic Playoff Rawlings Plymouth Champion Po-Do Pro-Croydon Pro-flite Queen Royal Ram Revolta Rocket Rock-it Royal Special S.W. TNC St. Regis Sam Dion Sam Snead Sandy Howard Sarazen Sarazen Squire Silver Jet Silver King Plus Snead Blueridge Star-flite Stranahan Supercharge Morkik Super Whippet Sweet Shot Synthetic Tam-O-Shanter Target Tee Three Star Titleist Armour Tommy Tommy Bolt Top-flite Top Notch Tourney True Blue Turf Master U. S. Royal Van Gaubeau Victor Walker Cup War Flite Warwick Wilson Jet Wilson Star Wil-Win Wyatt 444 50-50 65 — Diamond —

pears that more golfers slice than hook, so if you have a hole cut through woods and haven't time to cover both sides, best choose the righthand

Naturally, more balls are lost on the drive than the other shots except perhaps for well placed brooks. Also, naturally, more are lost when they land out of sight of the player.

It is surprising how many one finds with one's feet—in both deep grass and leaves

One year I found a ball made by an English company, with red hearts on it where we used spots. I thought how delightfully sentimental it seemed. A little later I found one by the same company marked with spades. Finally I got the whole set with the diamonds and clubs.

I was amazed that I found between 450 and 500 a summer but I met a friend the other day who makes me a piker. He goes to a hole at low tide, on the coast of Maine that is practically on an island. He goes in a kayak with scooping net and last summer got just over 1.500!

I am giving to the USGA Museum at "Golf House" my collection of 133 different makes with their unusual as well as well-known names. About half are marked with their maker's names—familiar to all of us—the others don't bother to say who made them.

One of the most interesting balls I found in 1959 was a gutta percha with the name "Joe Lloyd" stamped on it.

Joe Lloyd won the 1897 Open Championship at the Chicago Golf Club, Wheaton, Ill., and he was an Englishman who was in the United States only part of each year as a professional. He spent his winters at Pau, France.

Now here is more of interest. Joe Lloyd worked at the Essex County Club, Manchester, Mass., during those long-ago summers and he undoubtedly made the gutty ball which I found.

How did it come to be in the rough on the first hole? Who knows for sure?

But, this I know, it had not lain there for 60-odd years. I've been through that grass hundreds of times and would have found the ball long ago.

It is my guess that someone either dropped the old ball recently or took it out and hit it to see how a gutty acted. They probably could not find the ball but I'm so glad that I did.

## USGA FILM LIBRARY

"Famous Golf Courses: Scotland," is a 18minute film in full color. Famous holes were photographed at Troon, Prestwick, Carnoustie, St. Andrews, North Berwick and Muirfield.

"Walker Cup Highlights," is a 16-minute film tracing the early history and play for the first international golf trophy. Bob Jones, Francis Ouimet and other Walker Cup stars are shown. The latter half of the film is in color.

"St. Andrews, Cradle Of Golf," is a 14minute, full color, 16mm travelogue of historic St. Andrews, Scotland, its Old Course and the Royal and Ancient Golf Club clubhouse.

"First World Amateur Team Championship for Eisenhower Trophy," is a 14-minute, full color, 16mm film of the first World Amateur Team Championship at St. Andrews. Twenty-nine countries compete for the Eisenhower Trophy.

"On the Green," a 17-minute, full color, 16mm presentation filmed at the Mid-Ocean Club, Bermuda, illustrates correct procedures under the Rules of Golf governing situations arising on the putting green.

"Golf's Longest Hour," a 16mm full color production of  $17\frac{1}{2}$  minutes, depicts the closing stages of the 1956 Open Championship. Filmed at the beautiful Oak Hill Country Club, Rochester, N.Y., it shows the eventual winner, Cary Middlecoff, set a target at which Ben Hogan, Julius Boros and Ted Kroll strive in vain to beat.

"Play Them As They Lie," a 16mm color production of 16½ minutes in which Johnny Farrell, Open Champion of 1928, acts as Intermediary between Wilbur Mulligan, a beginner of unimpeachable integrity, and Joshua P. Sive, a past master in the art of breaking the Rules. The film was made at the Baltusrol Golf Club, Springfield, N. J., where Farrell is professional.

"Great Moments in Golf," lets the viewer see the many interesting exhibits in "Golf House," USGA headquarters in New York, and re-live golf triumphs of the past with many of the game's immortals. The film is a 16mm black and white production and runs 28 minutes.

"The Rules of Golf—Etiquette" stresses the importance of etiquette by portrayal of various violations of the code in the course of a family four-ball match. Ben Hogan appears in several scenes, and Robert T. Jones, Jr., makes the introductory statement. A 16mm color production of 17½ minutes.

The distribution of prints is handled by National Educational Films, Inc., 165 West 46th Street, New York 36, N. Y., which produced the films in cooperation with the USGA. The rental is \$20 per film; \$35 for two; \$50 for three; \$60 for four and \$70 for five, in combination at the same time, including the cost of shipping prints to the renter.

# THE USE OF RELAXATION IN TOURNAMENT GOLF By BILL CASPER, JR. 1959 National Open Champion

Pournament golf is a far more strenuous L business than most people think it is. To be sharp, a player must pace him-

To be sure, he needs plenty of rest while he's on the tour.

But, more important, he must be willing at times to "get away from it all."

It's not so easy to do this as one might suppose, because - - - and now I'm speaking from my own experience - - - tournament winners are expected to play. Sponsors are disappointed when they don't.

I have found that after I've played for six or seven weeks steadily I just have to take time off or I'll go stale. Consequently, I make it a point to take a two or three week breather about once every six or seven weeks.

Usually, following a layoff, I'm refreshed. My morale is higher, my decisions quicker and more accurate, my timing better and my scores lower.

Some of my victories have come after lengthy layoffs. For instance, I played but one tournament in the six weeks preceding the 1959 National Open, which I was fortunate enough to win.

Consider my victories in 1958, for example. I won the Bing Crosby National following a long autumn and early winter lavoff.

My next victory came in a playoff with Ken Venturi in the New Orleans Open. I hadn't played a tournament for more than a month.

Prior to my third 1958 victory in the Buick Open, I'd played only six competitive rounds in six weeks.

My final 1958 victory was in the Havana Invitational in November. I'd played only two tournaments in 10 weeks before I won this one.

I think the best way to get maximum mileage out of any period of relaxation is to have a diversion that will get my mind off golf.

My main diversion is fishing. However,

I fish not just for diversion's sake but because I love to fish. When I'm at home in Chula Vista, Calif., I go fishing more than twice as often as I play golf.

I practice golf very little and until the week before I rejoin the tour, I don't play more than twice a week. But I'll go fishing about four times a week.

I like both salt and fresh water fishing. When I go salt water fishing, I get up at 2:30 A.M.—that's right, 2:30 A.M.

Sometimes I go by myself and join about 15 others aboard a fishing boat that goes about 26 miles south, five miles off the Mexican coast.

Sometimes I'll go fishing with a party of friends. We usually return about

When I go fresh water fishing, I don't arise until about 6 A.M.

I've loved to fish ever since I was a kid. Why, last spring while walking down the fairway in a tournament, I jammed my hand into a pocket and caught a finger on a fishhook.

While fishing is my favorite diversion, I have others.

I'd like to add here that a man's family is in itself a diversion.

I like to spend a lot of time with my wife, Shirley, and our two children, Billy, 2, and Linda Maree, 4. We watch television together for a couple of hours in the evenings.

I suppose by nature I'm a fairly easygoing fellow, but don't think I don't get as mad when I miss-hit a shot or my putter sputters.

What helps me on this point, though, is that I shrug my misfortunes and disappointments off quickly. I don't brood over them. This is very important.

Another thing that I think helps me to relax is the fact that I practice very little.

My feeling on practice can best be summed up with the words, "If you don't have it when you come to the course, you won't discover it on the practice tee."

About the only time you should practice is when you're hitting some type of shot badly.

For the most part, I use practice strictly as a warm-up. I hit perhaps 60 shots before I play a competitive round, starting with the wedge and going through the No. 4 wood on the practice tee.

Once in a while, if a course calls for extremely good driving, I'll hit a few tee shots in practice.

I don't believe in practicing with any particular type of club or on any special type shot a week or several weeks prior to a tournament because it's usually impossible to determine the conditions that will prevail during a tournament that far in advance.

My view is that on the tour there is too much practicing. Too many players are practicing so long and hard that they are leaving their games on the practice tee. One of the hardest things to do in tournament golf is to develop a proper balance between trying hard and relaxing so you won't try so hard you defeat your own purpose.

Too many once-or twice-a-week golfers try too hard and expect too much of their abilities.

If more 90 to 100 shooters regarded golf as a diversion, as a means toward relaxation and exercise as well as friendly competition, I think more people would be getting more out of a great game.

For the better players, the ones who try too hard to do well, the best advice I can offer is to get more and more experience playing golf so you'll be better able to handle situations that come up.

Much tension and worry stem from nothing more than lack of knowledge.

If you combat lack of knowledge by acquiring greater experience, it follows that tension and worry should be reduced.

## Answers To "Quiz Golf." Questions On Page 7.

- 1. Fred Haas, Jr. He was a member of the 1938 Walker Cup Team and the 1953 Ryder Cup Team.
- 2. Norman Drew, of Northern Ireland. He played on the 1953 Walker Cup Team and the 1959 Ryder Cup Team.
- 3. Tommy Armour, a native Scot who later became an American. Mr. Armour played for Britain in the 1921 matches which set the stage for the inauguration of Walker Cup play in 1922. Then in 1926 he played on the American team in matches which set the stage for the inauguration of Ryder Cup play in 1927.
- 4. Yes, if he does not borrow from any other person playing on the course and does not unduly delay play. Under the same limitations he may also replace a club which becomes unfit for play in the normal course of play. (Rule 3)
- 5. The Old Course, St. Andrews, Scotland, 1938.
  - 6. He shall be disqualified. (Rule 37-9)
- 7. Walker Cup, Curtis Cup, Eisenhower Cup, Americas Cup, Ryder Cup and Canada Cup.
- 8. "Equipment" is anything used, worn or carried by or for the player except his ball in play. (Definition 7)
- 9. Ben Hogan's victory in the 1950 Open Championship, at Merion Golf Club, Ardmore, Pa. The victory came 16 months

- after the automobile-bus collision which almost took Mr. Hogan's life. He won the Open Championship despite difficulty in walking and other discomfiture.
- 10. Jack Nicklaus' second place finish last June at Cherry Hills.
  - 11. 10 and 8.
- 12. The player shall drop the ball himself. He shall face the hole, stand erect and drop the ball behind him over his shoulder. If the ball comes to rest against the player and moves when he moves there is no penalty, and the ball is played as it lies. (Rule 22-1)
- 13. No. The moved ball must be replaced. (Rule 40-1c)
- 14. No. He must replace his ball. (Rule 40-1c)
- 15. No. The player may either replace it or not, as he chooses. (Rules 27-2b and 35-2c)
  - 16. Approximately 6,000.
- 17. The National Amateur Championship. The first Amateur was played at the Newport Golf Club, Newport, R. I., October 1, 2, 3, 1895, while the first Open Championship was played at the same club October 4, 1895.
- 18. No. The penalty in match play is loss of the hole and in stroke play two strokes. (Rule 8-1)



## 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. "60-1" means the first decision issued in 1960. "D" means definition. "R. 37-7" refers to Section 7 of Rule 37 in the 1960 Rules of Golf.

## PENALTY: FOR DISCONTINUING PLAY 45 MINUTES BETWEEN NINES COMMITTEE: WHEN AUTHORIZED TO INTERVENE IN STROKE PLAY

USGA 60-20 R. 37-6, 37-7

Q: Four competitors in a stroke play event stopped after the ninth hole and went into the clubhouse to watch the final round of the Masters on television. They did this without the permission of the Committee and without notifying them.

They were off the course for 45 minutes, during which time seven other groups went through them. However, they did complete the round before the deadline set by the Committee for a

Another competitor lodged a protest of their action.

Q1: Was their conduct a violation of the Rules?

A1: Yes.

Q2: Assuming that this was a violation, should Rule 37-6 (Discontinuance of Play) or Rule 37-7 (Undue Delay) be invoked? Our Committee invoked a two-stroke penalty for undue delay.

A2: The players should have been disqualified under Rule 37-6 for discon-

tinuing play.

Q3: In an incident of this sort, is it necessary for another competitor to lodge a protest or may the Committee assess a penalty on its own volition if it finds there has been a breach of the Rules?

A3: In stroke play, the Committee has an obligation to the rest of the field to impose a penalty for any breach of the Rules of which it is aware. It is not necessary for the Committee to await a protest by a fellow-competitor.

> Questions by: James C. Anderson Sacramento, Calif.

## CONCESSION OF PUTT - FOUR-BALL OPPONENT CANNOT REFUSE TO ACCEPT

USGA 60-21 R. 35-2d, 37-8, 40-3h, 40-3i

Q: In a four-ball match with A and B partners against C and D, all four balls are lying on the green. A and B have almost identical putts, with A's ball being away.

A has used so many strokes in reaching the green that he is no longer in contention on the hole. Obviously, B will benefit from watching the line A's ball takes towards the cup and he is therefore very much interested in his partner's putt. Just before A putts, C walks over and knocks A's ball away and concedes the putt, freely admitting that he does not want A to putt so that A can show B the line to the cup. A replaces his ball and says that he has a right to putt in turn and that there is nothing the opposing partners can do to prevent him from playing when it is his turn to play.

(1) Is A correct in his position that he is entitled to play if he wishes to?

(2) If A is not entitled to play, what is the penalty if he does play?

Questions by: Herbert B. Brand Washington, D. C.

A1: No. Rule 35-2d provides: "When the opponent's ball has come to rest, the player may concede the opponent to have holed out with his next stroke and may remove the opponent's ball with a club or otherwise."

A2: A and B lose the hole. See Rules 35-2d and 403i. (In stroke play, A and B would be disqualified—see Rules 37-8 and 40-3h.)

## DAMAGE TO PUTTING GREEN: REPAIR OF BALL MARK A SECOND TIME

USGA 60-22 R. 35-1c

Q: May a ball mark on the putting green which has been repaired by a player be further repaired by another player in the same group or a following group?

A: Such a damaged area may be repaired a second time by any player only if it is still clearly identifiable as a ball mark.

## LOCAL RULE: PERMITTING PROVISIONAL BALL FOR BALL IN WATER HAZARD

USGA 60-23 R. 29-3, 30-1e, 33-2, 36-7, L.R.

Q: The thirteenth hole at the Waterbury Country Club is a par three which requires a carry over a pond of approximately 150 yards. Frequently a shot carries the pond but ends up in weeds between the water and the water hazard stakes. A ball can often be played from the hazard but this cannot possibly be determined until the player walks around the pond. We have always played a provisional ball to eliminate the long walk back to the tee in the event the original ball cannot be played.

Since the new Rules allow play of a provisional ball only if the original ball is thought to be lost or out of bounds (but not for a ball in a water hazard), how do you suggest we play the hole this year? Is there any reason why we should not draft a Local Rule permitting a provisional ball for a ball which may be unplayable in this water hazard?

Question by: Martin J. Moraghan, Jr. Waterbury, Conn.

A: The only procedure is that authorized by Rule 33-2. Although this may occasionally result in delay in play, the overall purpose of the Rules is thereby better served than by some other contrived solution.

The Rules of Golf do not countenance the play of a provisional ball for a ball which may be in a water hazard—see Rules 29-3 and 30-1e. We would hope the local committee will not make a Local Rule in conflict with the Rules of Golf—see Rule 36-7.

## PROVISIONAL BALL:

- (1) CONTINUED IN PLAY AFTER ORIGINAL BALL FOUND UNPLAYABLE
- (2) PLAYED IN BELIEF ORIGINAL BALL IS IN WATER HAZARD

USGA 60-25 D. 5, R. 1, 29-2b, 30

Q1: In stroke play on Hole 5, a competitor's drive headed towards out of bounds. The competitor played a provisional ball, under USGA trial Rule 30-1 for 1960.

The original ball was found in bounds but unplayable.

The competitor played out the hole with the provisional ball, then played from the next teeing ground.

Did the competitor properly complete the play of Hole 5?

A1: No. He should have abandoned the provisional ball, as required by Rule 30-2, last paragraph. He then should have played another ball under either option of Rule 29-2b for a ball unplayable.

Normally, a breach of Rule 29 entails a penalty of two strokes. However, Note 1 provides: "A serious breach of this Rule should be dealt with by the Committee under Rule 1."

The competitor's breach was serious he did not play the hole with a ball properly in play (see Definition 5). He failed to conform with Rule 1, which requires that a ball be played from the teeing ground into the hole by successive strokes in accordance with the Rules; the penalty is disqualification.

Q2: Rule 30-2 provides that a provisional ball shall be abandoned if the original ball be unplayable or in a water hazard. The penalty for violation stated under the Rule is two strokes. Would this be the proper penalty in the case cited in Question 1?

A2: No. Rule 30 does not deal with relief for an unplayable ball. Rule 29 governs that, and a serious breach of Rule 29 entails disqualification under Rule 1.

Rule 30 deals with a provisional ball. Its penalty applies when the player fails to conform with any part of the procedure for playing a provisional ball when permitted by the Rules.

The player had no authority to play any stroke with the provisional ball after he found his ball unplayable; in fact, he was obligated to abandon it.

Q3: A competitor played a provisional ball in the belief that his original ball might be unplayable or in a water hazard. He found his first ball in a water hazard. He then abandoned the provisional ball and proceeded under Rule 33-2 for water hazards. What is his penalty for playing a provisional ball when he had no right to do so?

A3: Two strokes—see penalty statements under Rules 29 and 30.

It should be noted that the player in this case played the hole with a ball properly in play—something he did not do in Question 1 above.

## DROPPED BALL: ROLLING NEARER HOLE THAN SPOT WHERE DROPPED

USGA 60-24 R. 22-2c, 22-2d

Q: Rule 22-2d provides that if a dropped ball come to rest nearer the hole than the point of dropping, it must be re-dropped, without penalty.

Does the phrase "point of dropping" conflict with the requirements in certain other Rules? For example, Rule 31-2 requires that, in the case of relief from an immovable obstruction, the ball be dropped within two club-lengths of a specific point of the obstruction, and come to rest not nearer the hole than its original position. Conceivably a ball could be dropped properly under Rule 31-2 but could come to rest nearer the hole than the point where it first struck

the ground. Is the point where it first strikes the ground the same as "the point of dropping" in Rule 22-2d?

> Question by: Kenya Golf Union Nairobi, Kenya

A: Not necessarily. The "point of dropping" means the place or the area for dropping as stipulated in the Rule governing the particular case. If a dropped ball rolls forward but does not pass that place or area, the player shall play the ball as it lies.

"The point of dropping" means the same in Rule 22-2c as in Rule 22-2d.

## IDENTIFICATION OF BALL: DISHONESTLY REFUSED

USGA 60-27

R. 1, 11-1, 11-4, 30, 36-5, Preamble 21

Q: Is the player the sole judge of identifying his ball? By purposely not identifying his ball, the player could take unfair advantage of certain Rules in some circumstances. Does an opponent or a fellow-competitor have the right to identify the player's ball?

A: The Rules are written on the assumption that golfers are honest, and there is nothing in the Rules which specifically covers the point.

In equity (Rule 11-4), an opponent or a fellow-competitor has the right to be satisfied about the identification of a ball or the lack of identification, especially as "Each player should put an identification mark on his ball"—see Preamble to Rule 21.

An opponent or a fellow-competitor who suspects that a player has dishonestly not identified his ball should make a claim under Rule 11-1. The referee or the Committee should consider all available information bearing on the matter.

Attention is called to the Committee's authority to impose disqualification under Rules 1 and 36-5.

## PROVISIONAL BALL: MAY NOT ALSO BE BALL IN PLAY

Q: May a player play a ball which is both (a) provisional under Rule 30-1 in which case the original ball be lost or out of bounds, and (b) the ball in play in case the original ball is deemed unplayable (Rule 29-2b(ii)) or is in a water hazard (Rule 33-2b)?

A: No. See Rule 30-2.

Questions by: Henry J. Meiers Cleveland District Golf Assn. Cleveland, Ohio



## Specifications for A Method of Putting Green Construction

BY THE USGA GREEN SECTION STAFF

Golf course construction is presently enjoying its most accelerated pace since the introduction of the game of golf into the United States. Not only are new courses being built but old ones are being "modernized."

The cost of maintenance has influenced some clubs in their decisions to undertake a rebuilding program. There is a need to do away with features such as sharp contours and abrupt tee slopes which create maintenance problems.

Golf course design and golf course construction have been considered an art rather than a science. The individuality and the character of golf courses in this country have resulted from the artistic talents of some of the great architects in whose minds they were conceived.

Likewise, construction methods have been developed as a result of individual experiences and individual preferences. It is a tribute to those whose efforts have gone into golf course building as well as to those who maintain them that so many courses have stood up well over the years.

The pace of golf activity and the traffic on golf courses is presently at a peak, however, which has never been equaled in our country. Many of the construction methods that were satisfactory in an earlier day, will no longer produce greens which will withstand the wear that is now imposed upon them.

Because of these considerations, the Green Section has for the last decade interested itself in construction methods and in a study of the physical problems of soils used in putting greens. Research in these matters has been sponsored by the Green Section at Beltsville; at Oklahoma State University; at UCLA; and during the past six years an intensive program of study has been supported at Texas A. & M. College.

It has been found that the problems of construction procedures and methods and those of physical behavior of soils cannot be separated. The two matters are related and must be considered together if a desired result is to be produced.

The findings of the Green Section sponsored research are such that a sufficient amount of information is now available to warrant the publication of a suggested method of construction. The procedures which are outlined here may well be used as the basis for specifications which a club may present to the prospective golf course builder.

Such specifications will place no limitations upon the individuality nor the artistry of any architect. They will, however, provide a guide for the builder and for the club which wants to be assured that the greens they build will continue to provide good playing conditions for

many years.

The basic considerations underlying the specifications and methods presented are those of good drainage and resistance to compaction. These ends cannot be achieved without some compromise. A permeable soil which drains highly readily offers some problems in the establishment of turf. It is loose and sometimes may create difficulty in the changing of cups. These are minor problems, however, when weighed against the advantages of rapid drainage, good aeration, deep rooting, protection against diseases, protection against over-watering, protection against salt problems, a putting surface which holds a shot without being overly wet and one which resists pitting by golf balls.

The methods and specifications outlined in the following pages represent the best thoughts of the Green Section staff and of numerous soil scientists who have given serious attention to the problem. It is hoped that they will result in more satisfactory and less troublesome putting greens throughout the nation.

## 1. Subgrade

The contours of the subgrade should conform to those of the proposed finished grade, with a tolerance of plus or minus 1". The subgrade should be constructed at an elevation 14 inches below the proposed finished grade. The subgrade should be compacted sufficiently to prevent future settling which might create water-holding depressions in the subgrade surface and corresponding depressions in the putting surface.

Where terrain permits, it is possible to build the subgrade into the existing grade or to cut it into the subsoil. It is not necessary to elevate or "build up" the green unless design considerations dictate the desirability of doing so.

It will be noted that courses of materials above the subgrade consist of 4 inches of gravel, 1½ to 2 inches of coarse sand, and 12 inches of topsoil. Thus the total depth will be 17½ to 18 inches. However, this fill material will settle appreciably,

## Bermudagrass

Question: How do you keep bermudagrass from seeding on the putting green?

Answer: Usually the tendency to produce seedheads indicates a need for heavier nitrogen feeding. Bermudagrass putting green turf can make use of as much as 2 lbs. of nitrogen per 1000 square feet per month during the growing season.

Some strains of bermudagrass give more trouble from the standpoint of seedhead production than others. Choose a selection that behaves well in this respect, then fertilize generously.

and experience indicates that 14 inches will be the approximate depth of these combined materials after settling.

## 2. Drainage

Tile lines of at least 4-inch diameter should be so spaced that water will not have to travel more than 10 feet to reach a tile drain. Any suitable pattern or tile line arrangement may be used, but the herringbone or the gridiron arrangements will fit most situations.

Cut ditches or trenches into the subgrade so tile slopes uniformly. Do not place tile deeper than is necessary to obtain the desired amount of slope. Tile lines should have a minimum fall of .5%. Steeper grades can be used but there will seldom be a need for tile line grades steeper than 3% to 4% on a putting green.

Tile may be agricultural clay tile, concrete, plastic, or perforated asphalt-paper composition. Agricultural tile joints should be butted together with no more than ¼" of space between joints. The tops of tile should be covered with asphalt paper, fibreglass composition, or with plastic spacers and covers designed for this purpose. The covering prevents gravel from falling into the tile.

Tile should be laid on a firm bed of ½" to 1" of gravel to reduce possible wash of subgrade soil up into tile line by fast water flow. If the subgrade consists of undisturbed soil, so that washing is unlikely, it

is permissible to lay tile directly on the bottom of the trench.

After the tile is laid, the trenches should be backfilled with gravel, being careful not to displace the covering over the joints.

## 3. Gravel and Sand Base

a. The entire subgrade should be covered with a course of clean washed gravel or crushed stone placed to a minimum thickness of 4 inches.

The preferred material for this purpose is washed pea gravel of about 14" diameter particle size. Larger gravel or stone may be used, but it is important that changes in size between this course of material and the succeeding one overlying it not be too great. Otherwise, smaller particles from overlying material will wash into the gravel, clog the pores or drainage ways and thereby reduce the effectiveness of the gravel.

The maximum allowable discrepancy appears to be 5 to 7 diameters. In other words, if ½" pea gravel (about 6 mm.) is used, then the particles of the overlying course of sand should not be less than 1 mm. in diameter. If stone of 1 inch diameter were used, it would be necessary to include a course of pea gravel to prevent the movement of smaller soil aggregates into the stone.

b. When the gravel is in place, assuming that pea gravel has been used, a 1½" layer of coarse washed sand (commercial concrete sand is satisfactory) should be placed to a uniform thickness over the gravel.

The tolerance for error in the thickness of gravel and sand courses should be limited to plus or minus .5 inch.

A profile of a properly constructed putting green is illustrated in Figure 1.

## 4. "Ringing" the Green

When the courses of gravel and sand are in place and outlets have been established for subsurface water (through tile lines), the green should be "ringed" with the soil which is to be used for aprons and collars. This soil should be placed

around the green and any contours established in such a way that they will blend into the putting surface.

The next step is to fill the depression, which represents the putting surface, with the prepared topsoil mixture described in the following paragraphs.

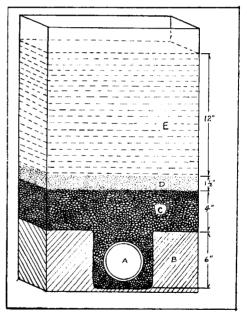
## 5. Soil Mixture

A covering of topsoil mixture at least 12 inches in thickness should be placed over the sand and gravel layers.

The soil mixture should meet certain physical requirements.

Permeability—After compaction at a moisture content approximately

Figure 1
CROSS SECTION OF A PUTTING
GREEN PROFILE SHOWING A
TRENCH AND TILE LINE



- A. 4-inch diameter tile.
- B. Subgrade of native soil or fill material.
- C. Gravel—preferably pea gravel of approximately ¼" diameter. Minimum thickness 4 inches.
- D. Coarse sand—this sand should be of a size of 1 mm. or greater. One and one-half to 2 inches in thickness.
- E. Topsoil mixture. Minimum thickness of 12 inches.

field capacity as described by Ferguson, Howard and Bloodworth (8), a core of the soil mixture should permit the passage of not less than ½ inch of water per hour nor more than 1½ inches per hour when subjected to a hydraulic head of .25 inches.

Porosity—After compaction, a sample of the soil mixture should have a minimum total pore space of 33%. Of this pore space, the large (noncapillary) pores should comprise from 12 to 18% and capillary pore space from 15 to 21%.

Information with respect to bulk density, moisture retention capacity, mechanical analysis, and degree of aggregation in the hands of a soil physicist may be helpful in further evaluating the potential behavior of a putting green soil.

Few natural soils meet the requirements stated above. It will be necessary to use mixtures of sand, soil, and organic matter. Because of differences in behavior induced by such factors as sand particle size and gradation, the mineral derivation and degree of aggregation of the clay component, the degree of decomposition of the organic matter, and the silt content of the soil, it is impossible to make satisfactory recommendations for soil mixtures appropriate laboratory without analyses.

The success of the method of construction herein described is dependent upon the proper physical characteristics of the soil and the relationship of that soil to the drainage bed underlying the green. Therefore a physical analysis of soil should be made before the soil components are procured. When the proper proportions of the soil components have been determined, it becomes extremely important that they be mixed in the proportions indicated. A small error in percentages in the case of a plastic clay soil can lead to serious consequences. To insure thorough mixing and the accurate measurement of the soil components, "off site" mixing is advocated.

Any soil physics laboratory which is equipped with the facilities to

carry out the measurement described by Ferguson, et al (8) can prescribe a soil mixture for putting green use. Green Section offices can provide names of laboratories so equipped upon request.

## 6. Soil Covering, Placement, Smoothing and Firming

When soil has been thoroughly mixed off site it should be transported to the green site and dumped at the edge of the green. Padding the edge of the green with boards may be necessary to prevent disturbance by wheeled vehicles of the soil previously placed around the outside of the putting surface. A small crawler-type tractor suitably equipped with a blade is useful for pushing the soil mixture out onto the prepared base. If the tractor is always operated with its weight on the soil mixture that has been hauled onto the site, the base will not be disturbed.

Grade stakes spaced at frequent intervals on the putting surface will be helpful in indicating the depth of the soil mixture. Finishing the grade will likely require the use of a level or transit.

When the soil has been spread uniformly over the surface of the putting green it should be compacted or firmed uniformly. A roller usually is not satisfactory because it "bridges" the soft spots.

"Footing" or trampling the sur-

"Footing" or trampling the surface will tend to eliminate the soft spots. Raking the surface and repeating the footing operation will result in having the seed or stolon bed uniformly firm. It should be emphasized that the raking and footing should be repeated until uniform firmness is obtained.

Whenever possible after construction saturation of the soil by extensive irrigation is suggested. Water is useful in settling and firming the surface. This practice will also reveal any water-holding depressions which might interfere with surface drainage.

## 7. Sterilization of Soil and Establishment of Turf

These steps may be accomplished

by following well-known conventional procedures.

The foregoing steps in construction have been used successfully in many greens in various parts of the nation. It should be emphasized that each step in construction is dependent upon all the others. It is inadvisable to use a blanket of gravel unless the proper soil mixture is used above. It is inadvisable to use the gravel and the proper soil mixture unless the intermediate layer of sand is used to separate them. The courses of gravel and sand may result in saturation of the lower portions of the topsoil mixture unless the proper soil mixture is used.

In short, do not attempt to incorporate some of these steps into green construction unless they are all used in exact accordance with these recommendations.

The foregoing specifications tell the club how to proceed with the job of building a putting green but they do not tell why one should follow these procedures. There is ample evidence in the body of published literature to support the methods herein advocated. For those who are interested in a study of the principles which are involved and which are used as a basis for the recommendations set forth. a list of references is appended.

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## Wound Dressings for Trees

BY PROF. DONALD S. WELCH

Department of Plant Pathology, N. Y. State University

Whenever breaks or cuts occur in the bark of woody plants, either by accident or design, it is desirable to protect the resulting wounds. Such protection has two objectives, to exclude wood-destroying fungi and insects, and to facilitate healing. Cuts made in late winter or early spring heal most rapidly, but there is evidence that wounds involving sapwood only, may react more favorably against entrance of fungi if made during the growing season. In any case some protection of freshly-made wounds is probably worth while.

For temporary treatment Orange Shellac is one of the most satisfactory materials. If applied soon after the injury or cut has taken place, it has an antiseptic effect and also protects the living tissues from drying. It can be applied freely to the cambium, bark and sapwood without fear of injurious effects. The durability of shellac is poor, however, and except on very small wounds is should be followed soon by some more permanent cover

The following materials containing asphalt are generally recommended:

ASPHALT VARNISH (Gilsonite) is a preparation of natural asphalt, which if made up to standard specifications, makes a durable dressing and favors healing of the wound. It is a heavy black varnish, applied easily with a brush. It may blister if the woody surface is wet.

FIBRATED ASPHALT ROOFING PAINTS. Some of these may be substituted if the above asphalt preparation is not available. These paints are very heavy and are better handled in warm weather. Since roofing paints are by nature waterproof, they will not adhere well on a wet surface.

WATER—ASPHALT EMULSION. This preparation is sometimes sold under various trade names such as Tree Seal, Tree Heal, Flint-Kote, etc. It is usually possible to obtain it in some form from dealers in gardener's or tree surgeon's supplies. Water-asphalt emulsion is a thin paste which may be applied with a

### COMING EVENTS

September 28-29-30 Northwest Turf Association Conference University of Washington Seattle, Washington September 26-27 Utah-Idaho Turf Conference Sait Lake City, Utah October 3-4 New Mexico Turfgrass Conference New Mexico State University University Park, N. M. October 6-7 Colorado Turf Conference Colorado State Universty Fort Collins, Colorado October 19-20-21 Central Plains Turfgrass Conference Kansas State University Manhattan, Kansas November 17-18 Arizona Turf Conference University of Arizona Tucson, Arizona November 30-December 1-2 15th Annual Oklahoma Turfgrass Conference Oklahoma State University Stillwater, Okla. December 5-9 Fifty-Third Annual Meeting of American Society of Agronomy Morrison Hotel Chicago, III. December 12-13-14 15th Annual Texas Turfgrass Conference Texas A. & M. College College Station, Texas

brush or a paddle. It may be used to treat freshly-made wounds, even before the surfaces are dry. This is an advantage over most materials. The emulsion hardens quickly and should not be left in a container exposed to the air. Since it contains water, it cannot be worked at temperatures below freezing.

In selecting any asphalt preparation, caution should be exercised against the use of those which, by their odor or by the label, are suspected of containing carbolineum, creosote, gasoline, or similar materials. Such products are injurious to living trees.

Where asphalt paints are not obtainable, other materials may be substituted.

HOUSE PAINTS of the type containing linseed oil, designed for outside use, are fairly satisfactory if properly used. The oil is known to injure the live bark on some trees, particularly maple and

walnut, but this trouble may be avoided by first applying orange shellac as described above. Another disadvantage of linseed oil paints is the difficulty of using them on surfaces where there is free moisture. They are not as satisfactory as the asphaltum preparations.

BORDEAUX PAINT is a homemade preparation made by mixing powdered Bordeaux mixture and raw linseed oil to the consistency of a thick paint. This material is assumed to possess disinfect-

ing or fungicidal properties. Otherwise it appears to be like house paint.

For best results, wound dressings should be inspected at least once a year and repaired when necessary. Whatever the treatment used, no dressing can be considered to be permanent. Attention to maintenance will increase the effectiveness of all such efforts to protect and preserve valuable trees.

--Reprinted from Westchester County Farm and Home News

## Laboratory Methods For Evaluation of Putting Green Soil Mixtures

BY MARVIN H. FERGUSON, LEON HOWARD, AND MORRIS E. BLOODWORTH
Mid-Continent Director, USGA Green Section; Former Graduate Assistant and Associate Professor, respectively, at Texas A. & M. College

The suitability of soil mixtures for putting green use may be evaluated by the determination of certain physical characteristics. These characteristics may be determined by laboratory procedures.

Inasmuch as some of the physical measurements will be affected by the degree of compaction to which the mixtures are subjected, it becomes necessary to outline standard methods of procedure in order that laboratory data may be interpreted properly.

The most useful information in evaluation of putting green soil mixtures comes from determinations of permeability (hydraulic conductivity) and pore space relationships. Information with respect to mechanical analysis, mineral derivation, aggregation, bulk density, and moisture retention characteristics is helpful but is most useful in its relation to the permeability and pore space considerations.

Methods of procedure have been worked out by Kunze (4) and Howard (3) in connection with investigations they carried out while pursuing graduate studies at Texas A. & M. College. For the most part these procedures are modifications of methods in standard use and which are fully described in the literature.

Permeability (Hydraulic conductivity)

The hydraulic conductivity of a soil is determined by the amount of non-capillary porosity of that soil and it is further affected by the size and continuity of the macropores. Because hydraulic conductivity is dependent upon the pore space relations within the soil, and because the

noncapillary pore space is reduced by compaction, it becomes one of the most important measurements in the evaluation of a soil.

In preparing the sample, a copper cylinder three inches in length and two inches in diameter, open at both ends, is used. To the top of this cylinder is fixed a retaining ring of the same diameter and one inch in width. This ring is held on top of the cylinder by a broad rubber band such as may be cut from a bicycle inner tube. The other end of the cylinder is covered by a double thickness of cheese cloth and this is also held in place by a rubber band.

An air dry sample of a soil mixture is placed in the cylinder and settled by gentle tapping. Samples so prepared are placed in water and soaked for two hours to assure saturation. They are then transferred to a tension table. A tension of 40 cm. of water is imposed and samples remain on this table until they reach equilibrium.

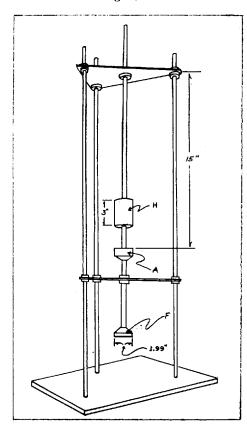
## TURF MANAGEMENT

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., 350 West 42nd Street, New York 36, N. Y., or local bookstores. The cost is \$7.

It is assumed that samples which have reached equilibrium under this tension are at field capacity and that this is the stage at which compaction is capable of reaching its maximum. Samples are compacted with the impact type compactor shown in Figure I. A compactor of this type is fully described by Bruce (2). Fifteen drops of the weight (45 foot pounds of energy) have been found to

Figure 1



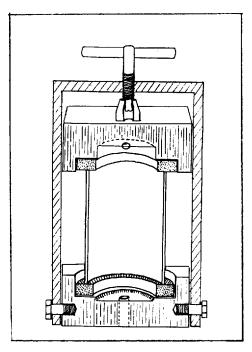
An impact type compactor. The soil sample is placed under the foot (F) of a plunger. The hammer (H) which weighs 3 lbs. is dropped 15 times over a distance of one foot. Thus 3 foot lbs. of energy is applied to the anvil (A) and thence to the soil sample at each drop. It has been found that 15 drops of the hammer will produce a degree of compaction comparable to that found in a severely compacted putting green, provided the soil contains moisture approximating field capacity.

produce a degree of compaction in laboratory samples comparable to that found in undisturbed cores taken from a compacted putting green.

After compaction, the one inch retainer ring is removed and the top of the compacted sample is trimmed smoothly to the level of the top of the cylinder. The compacted samples are replaced in water and soaked for 4 hours to insure saturation, weighed, and placed in the permeameter. The infiltration rate is measured with a ¼" hydraulic head. The permeameter must be so constructed that it will permit very accurate control of the hydraulic head for each sample. Figure 2 shows the type permeameter used.

The sample is kept under a constant hydraulic head of  $\frac{1}{4}$ " for 24 hours. The amount of water passing through the sample is measured at certain intervals of time and the conductivity is calculated and reported in inches per hour.

Figure 2



Cross section view of the type of permeameter unit used to determine the hydraulic conductivity of soil cores in the laboratory.

## **Porosity Determinations**

When the sample is removed from the permeameter, it is again placed on the tension table at 40 cm. of water tension and allowed to come to equilibrium. The equilibrium or field capacity weight of the sample is recorded and the sample transferred to a pressure plate apparatus.

In the pressure plate apparatus, as described by Richards, et al (6) pressures of ½, % and one atmosphere are maintained and the equilibrium weight of the sample is recorded for each of these pressures. After making the one atmosphere measurement, the sample is transferred to a pressure membrane apparatus where 3, 6, and 15 atmosphere levels are measured and recorded. The pressure membrane apparatus is described in detail by Richards (5).

The sample is now oven-dried and weighed. Bulk density may be calculated by dividing the oven dry weight by the apparent volume of the sample.

## Moisture Retention Characteristics

Capillary and noncapillary porosity measurements are made on a gravimetric basis. A tension or suction of 40 cm. of water is applied to saturated core samples. Water removed by this tension is considered to be that which occupies noncapillary pore space and that which is retained is considered to occupy capillary pore space. Baver (1, p. 269) states that a tension of 40 cm. gives the best agreement between percolation and porosity.

The calculation of pore space is as follows:

V = apparent volume of the

Mechanical analysis, bulk density, degree of aggregation, and mineralogical information are derived through standard

sample.

procedures which are described in the literature.

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- 6. Richards, L. A., and Fireman, M., Pressure plate apparatus for measuring moisture sorption and transmission by soils. Soil Sci. 56:395-404, 1943.

## Tips For Using Pesticides

- 1. Always read the label before using pesticide sprays or dusts. Note warnings and cautions each time before opening container. READ AND FOLLOW DIRECTIONS FOR USE.
- 2. Keep sprays and dusts away from children, pets and irresponsible people. Store pesticides in a secure place away from food and feed.
- 3. Don't smoke while spraying or dusting, and avoid inhaling sprays or dusts.
- 4. Do not spill sprays or dusts on the skin or clothing. If they are spilled, remove contaminated clothing and wash exposed skin areas thoroughly.
- 5. Use separate equipment for applying hormone-type herbicides to prevent accidental injury to susceptible plants.
- 6. Dispose of empty containers so that they pose no hazard to humans, animals or valuable plants.

If symptoms of illness occur during or shortly after spraying or dusting, call a physician or get the patient to a hospital immediately. Physicians now have available information for the quick and effective treatment of accidental overexposure to pesticides.

-From NAC News and Pesticide Review

and

IT'S YOUR HONOR

IN APPRECIATION

To The USGA:

The Captain and Members of the Royal and Ancient Golf Club thank Royal and Ancient Golf Club base giving after the final round in the presence of a very large crowd of spectators.

It was accepted on behalf of the Royal and Ancient Golf Club by the Captain, Mr. Henry Turcan, who in a few well chosen words thanked your Association and took the opportunity of expressing the good wishes of golfers in this country to their friends in the United States.

The declaration has been framed and will hang in the Clubhouse as a symbol of goodwill on a memorable occasion.

With kindest regards and all good wishes.

BRIGADIER ERIC BRICKMAN Secretary, Royal and Ancient Golf Club of St. Andrews, Scotland

SUCCESSFUL FILMS

Except from a letter sent to National Educational Films producer of USGA golf films.

"I would like to quote for you from a report received recently from our Public Relations associates with our affiliated company in South Africa, Pyc. Ltd. in Capetown, dated July 5, 1960:

To The USGA:

We have had signal successes with our series of golf films, which must rank as the most popular we have ever used. Showings have been reserved almost exclusively for golfing bodies and the letters of appreciation we have ever used. Showings have been reserved almost exclusively for golfing bodies and the letters of appreciation we have ever used. Showings have been reserved almost exclusively for golfing bodies and the letters of appreciation we have ever used. Showings have been reserved almost exclusively for golfing bodies and the letters of appreciation we have ever used. Showings have been reserved almost exclusively for golfing bodies and the letters of appreciation we have ever used. Showings have been reserved almost exclusively for golfing bodies and the letters of appreciation we have ever used. Showi

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