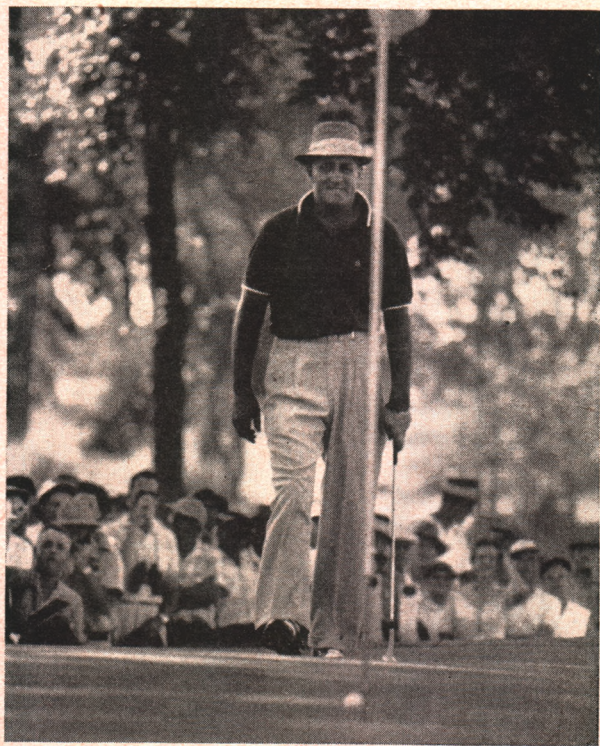




# USGA JOURNAL

AND  
TURF MANAGEMENT

## THE NEW OPEN CHAMPION



Tommy Bolt, calm and sure, led all the way in the Open Championship at the Southern Hills Country Club, Tulsa, Okla., to win by a margin of four strokes over the bright young South African golfer, Gary Player (See story on page 5).

JULY, 1958



# USGA JOURNAL

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TURF MANAGEMENT

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## USGA COMPETITIONS FOR 1958

### Championships

Championship or Team Match	Entries Close	Sectional Qualifying Rounds	Dates of Event	Location
<b>Junior Amateur</b>	Closed	July 15	July 30-Aug. 2	University of Minnesota Golf Course St. Paul, Minn.
(a) <b>Curtis Cup Match</b>	—	—	August 8-9	Brae Burn C. C. West Newton, Mass.
<b>Girls' Junior</b>	July 25	None	August 11-15	Greenwich C. C. Greenwich, Conn.
<b>Women's Amateur</b>	Aug. 1	None	August 18-23	Wee Burn C. C. Darien, Conn.
(b) <b>Americas Cup Match</b>	—	—	September 5-6	Olympic C. C. San Francisco, Cal.
<b>Amateur</b>	Aug. 7	Aug. 26	September 8-13	Olympic C. C. San Francisco, Cal.
<b>Senior Amateur</b>	Aug. 29	Sept. 16	Sept. 29-Oct. 4	Monterey Peninsula Country Club, Pebble Beach, Cal.
(c) <b>World Amateur Team Championship</b>	—	—	October 8-11	Old Course, St. Andrews, Scotland

Dates entries close mean last dates for application to reach USGA office. For possible exceptions in dates of Sectional Qualifying Rounds, see entry forms.

(a) **Curtis Cup Match**—Women's amateur teams: British Isles vs. United States.

(b) **Americas Cup Match**—Men's amateur teams: Canada vs. Mexico vs. United States.

(c) **World Amateur Team Championship**—Men's teams, stroke play.



## To Wit, a Wit

Gary Player, a delightful young South African professional who finished second in the USGA Open Championship last month, was praising Tommy Bolt, the new Champion, at the presentation-of-prizes ceremony.

"Tommy's a wonderful fellow," said Gary; "in fact, there are only a few of us left."

## Policy on Gambling

The USGA's opposition to organized gambling in connection with golf tournaments, which has been a matter of public record since 1949 and a matter of conviction far longer than that, is still a subject of prime importance.

In 1956 the Executive Committee resolved that:

"The United States Golf Association disapproves of gambling in connection with golf tournaments because of the harm it can do to the best interests of the game.

"Golf is a game to be played primarily for its own sake, especially amateur golf. When it is played for gambling motives, evils can arise to injure both the game and individual players.

"Therefore, the United States Golf Association urges its Member Clubs, all golf associations and all other sponsors of golf competitions to prohibit gambling in connection with tournaments."

This refers to all forms of organized gambling, including Calcutta auction pools, pari-mutuel betting, lotteries and other devices.

The voluntary response which this

resolution has engendered has been very gratifying, and it is hoped that the USGA will continue to have the cooperation of its Member Clubs and of other associations in support of these principles.

## Hill Of Fame

The Oak Hill Country Club, Rochester, N.Y., has dedicated another oak tree on its Hill of Fame to the memory of a great golfer.

This year's choice has fallen to the late Mrs. Mildred D. Zaharias, former Women's Open and Amateur Champion and Olympic hurdler and javelin thrower.

The dedication ceremony took place during the annual meeting of the New York Seniors, who sponsored it.

Mrs. Zaharias is the first woman to be so honored. She will take her place on the Hill of Fame alongside President Eisenhower, Robert T. Jones, Jr., Walter Hagen, Cary Middlecoff, Ben Hogan and Charles Evans, Jr.

## 1960 Open in Denver

The 1960 Open Championship will be held at the Cherry Hills Country Club, Englewood, Colo., June 16-17-18. The 1959 Open will be held at the Winged Foot Golf Club, Mamaroneck, N.Y., June 11-12-13.

## R. and A. Captain-Elect

Lord Morton of Henryton, a Lord of Appeal, has been nominated by the past Captains of the Royal and Ancient Golf Club of St. Andrews, Scotland, as Captain-elect for 1958-59 to succeed John B.

Beck. He will play himself into office at the Autumn Meeting of the Club in September.

## **PGA Hole-in-One Contest**

The Professional Golfers' Association will conduct its second National Hole-in-One Contest Labor Day, September 1.

All golfers at clubs and courses employing a PGA professional are eligible to enter.

Last year's winner was Dr. Fred W. Whittaker, of Penobscot Valley Golf Club, Bangor, Me., who holed out at the 196-yard 16th, the longest ace recorded on Labor Day, 1957.

## **Statistics Prove Golf Boom**

The number of golf courses in the United States is steadily climbing back towards the all-time pre-war high of 5,727 in 1934. As of April 1, 1958, the figure stood at 5,686, with a further 267 courses under construction, according to the National Golf Foundation. Statistics relating to projects in the planning stages and additions to existing courses also show increases on previous years.

College and university golf courses have reached the record total of 128 and this category is still growing.

## **Wm. Ward Foshay**

### **Joins Executive Committee**

Wm. Ward Foshay, of New York, N.Y., has been elected by the USGA Executive Committee to fill the vacancy caused by the death of Gordon E. Kummer, of Milwaukee, Wis., last April.

Mr. Foshay, who has served as General Counsel since 1956, will continue to serve in that capacity this year.

## **A Junior Golf Program**

The USGA Junior Championship Committee has prepared a 16-page booklet entitled "A Junior Golf Program for your Club and District." It is intended to furnish assistance in organizing and developing such programs for both boys and girls.

Copies have been sent to all member clubs. A limited number of additional copies are available, free of charge, from "Golf House," 40 East 38th Street, New York 16, N.Y.

## **No Worries for Father!**

The Southern Hills Country Club, Tulsa, Okla., was very thorough in its preparations for the Open Championship. Not only were courtesy cars and air-conditioned buses placed at the disposal of contestants but a nursery was provided in a nearby school for contestants' children and a baby sitters' agency was alerted to provide help where needed.

## **How Old is New**

A visitor to St. Andrews, Scotland, had a round over the New Course during the course of which he commented to his caddie on the quality of its layout.

"Ay," said the caddie, "it'll be a guid course when it gets established."

"When was it constructed?" inquired the visitor.

The old caddie thought for a moment and scratched his head. "Ah, weel," he said, "it was opened for play in 1895!"

## **Veteran Memberships and Club Dues Tax**

The Bureau of Internal Revenue Ruling 58-188 amplifies previously rendered opinions by providing that a club membership granted for a definite period of years is not a life membership even though the period of years may cover the prospective life of the recipient, and since the membership terminates at the expiration of the period it is not subject to the club dues tax on life memberships.

In the particular case, a club granted 20-year non-dues-paying memberships to persons who had been members for 20 years and who had reached 70 years of age.

Revenue Ruling 55-198 holds in part that honorary memberships which are granted for a definite period of time and are in fact terminated at the expiration of that period and are not renewed are not considered life memberships and are not subject to the tax provided no dues or membership fees are paid.

## **Vandals Trouble Oak Hill**

Many clubs are seriously disturbed by constant acts of vandalism which are causing loss and damage to the course at considerable annual expense.

At the Oak Hill Country Club, Rochester, N.Y., for example, hedges bordering the courses have been removed or burned. A 1,000-foot hedge enclosing a compost heap was completely destroyed. Flags, ball washers, memorial benches and plates and bamboo poles for retrieving balls from water have been stolen. Golf balls by the hundreds have disappeared from the practice range. Fairways have become tracks for drag racing by hot rodders while other vandals find humor in turning on sprinklers to the detriment of the sod.

The only satisfactory solution now appears to be to build a fence round the entire property, a factor which may run the Club into an expense of nearly \$50,000.

## 852 Courses in 62 Countries

Carl E. Dietze, a semi-retired income tax attorney from Milwaukee, Wis., is a golfer hard on the heels of John B. Ryerson, of Springfield Center, N.Y., and A.O. Nicholson, of Dallas, Texas, as far as playing new courses is concerned.

As of December 31, 1957 Ryerson's total had climbed to 1,112. Nicholson, as of November last year, stood at 1,059. Dietze claims 852 courses, but has the added distinction of having played them in 62 different countries. His one regret on his return from his last overseas trip was that he had missed out in Albania, Yugoslavia and Turkey.

Mr. Dietze, who is President of the North Hills Country Club, Menomonee Falls, Wis., and secretary and treasurer of the Wisconsin Senior Golf Association, started to play at the age of 40; took to the game seriously at 50 and now, aged 71, devotes two vacations a year to travel and golf.

The record number of courses played, which is unlikely to be equalled for years to come, is held by Ralph A. Kennedy, of New York, N.Y., who put away his clubs when he played his 3,165th course.

## Public Links

### — Private Ownership

The Silver Lake Golf Club, Orland Park, Ill., site of the USGA Amateur Public Links Championship this month, is somewhat different from the usual

venues, for it is a public course under private ownership, the third of its kind to entertain the event. Salisbury Plains Golf Course, in Long Island, N.Y., was owned by John J. Lannin when the Championship was held there in 1925, and the Ridgewood Golf Links, in Cleveland, Ohio, was a privately owned fee course when it housed the 1927 Championship.

Silver Lake is owned and operated by John R. Coghill, the second generation to follow this unusual vocation. The family's introduction to the business side of golf dates back to 1927 when John's father,



**JOHN R. COGHILL**

Bert F. Coghill, designed and built Cog Hill, a 36-hole golf course near Lemont, Ill. Ten years later he purchased Silver Lake Golf Club, a course laid out in 1928 as a public links.

Adjacent to Silver Lake was another course, the Euclid Hill Club, originally designed by architect Leonard Macomber for a Masonic order in 1927-28, but since defunct. This, too, came under Coghill ownership in 1939, and the two courses were redesigned to make a correlating 36-hole lay-out with one central clubhouse.

The two circuits are known as the North and South courses. The North, the longer, measuring some 6,856 yards, was the one chosen for the Amateur Public Links Championship.

## NEW MEMBERS OF THE USGA

### Regular

Columbus Park Golf Club,	Ill.
Country Club of Keswick,	Va.
Eagle Haven Golf Course,	Va.
Green Valley Golf Association,	N. C.
Humphreys County Country Club,	Miss.
Klinger Lake Country Club,	Mich.
Park Lane Country Club,	Iowa
Shaw Air Force Base Golf Club,	S. C.
Springlake Country Club,	Ill.

John Coghill has been bred in the golfing world, and at the age of 42 nothing would wean him from it. He has three sons and his hope is that one or other will follow in his footsteps.

## The Babe's Memorial Fund

The Babe Didrikson Zaharias Cancer Memorial Fund of Galveston, Texas, which in the past three years has raised nearly \$100,000 for cancer control projects at the Universities of Texas and Florida, has been transferred, with the consent of George Zaharias, to the American Cancer Society and will henceforth be known as the Babe Didrikson Zaharias Memorial Fund of the American Cancer Society.

It was felt that the parent body was better equipped to give the Fund added momentum and to continue to enlist the help and support of sportsmen and women in this most worthy project.

## Carr Takes Second Title

Joseph B. Carr, the Irish amateur with the longest post-war golf record on the other side of the Atlantic, won his second British Amateur Championship at St. Andrews, Scotland, when he defeated fellow Walker Cup player Alan Thirlwell, 3 and 2, in the 36-hole final. Carr won his previous title in 1953.

The feature of the final was Carr's spectacular eagle 2 at the thirtieth, where he drove the green, a distance of 360 yards, and holed a curly 60-foot putt.

## Small Ball Disapproved in United States

It has been brought to notice that some golfers are using the British type ball (diameter not less than 1.62 inches) as opposed to the United States ball (diameter not less than 1.68 inches).

It is important to the welfare of golf that the American standard be used in the United States, and the cooperation of golfers is sought in adhering to the USGA standard ball.

## Miss Grace Lenczyk a Bride

Miss Grace Lenczyk, of Newington, Conn., Women's Amateur Champion in 1948 and a member of the 1948 and 1950 Curtis Cup Teams, was recently married to Robert J. Cronin, of Pawtucket, R.I.

## Books Received

**GOLFERS AT LAW** by Geoffrey Cousins (Stanley Paul, London, 12s. 6d.) This examination of the Rules of Golf, from their evolution and development up to the present international code, embraces the history of the game itself in an easy flowing narrative.

**FUN IN THE ROUGH** (Prentice-Hall, Inc., \$2.95). The cream of the humor which has appeared in *Golf Digest* has been gathered together by the editor, Howard Gill, into a mirthful volume.

**GOLF FOR INDUSTRY**. Eighty-five industrial plants now operate golf courses as employee facilities, according to the National Golf Foundation's latest publication, edited by Ben Chlevin. This planning guide is a "must" for all recreation directors who operate industrial courses.

**THE TRUTH ABOUT GOLF ADDICTS** by George Houghton (Museum Press Ltd., London, 12s.6d.). Mr. Houghton has a delightfully light and humorous touch without descending into the realms of farce. His latest book contains several entertaining chapters on his golfing experiences in the United States.

**HOW TO TEACH YOURSELF THE EXPERT GOLF SWING** by Leigh Walsh (A.M. Regan, San Francisco). Mr. Walsh seeks to illustrate the science of the modern upright swing as evolved by the modern tournament professional.

**GOLFING TECHNIQUE IN PICTURES**, edited by Tom Scott (Pitman Publishing Corp., \$6.50). A series of illustrated instruction chapters contributed by leading British professionals.

**GOLF AT A GLANCE**, by Bud Gaskill (Arco Publishing Co., Inc., \$1.00). A booklet calculated to spoon-feed the beginner, reducing instruction to the lowest common denominator of "Do's and Don'ts."

# CONTROL IN THE OPEN AND TOMMY BOLT

By  
JOSEPH C. DEY, JR.  
USGA Executive Director

**T**he essence of golf is control — the ability to play shots to a series of target areas, climaxing in the hole. In USGA championships there is a special premium on this ability; the more widely one misses a target area, the more difficult is the recovery likely to be, for the rough is graduated away from fairways and greens, and other pitfalls await the strayer.

Control of the stroke, however, can hardly be achieved without control of the self. The champions have always been marked by disciplined thoughts and emotions, which enable them to concentrate their playing skill effectively. Conversely, unbridled spirit often takes physical shape in dissipated, uncontrolled shots.

Now Tommy Bolt for years has had the ability to put his shots in the target areas. His fellow-professionals against whom he competes almost daily have long recognized his solid technical skill.

But Bolt has been rather late in arriving at his full capabilities. He is frank to say that he had been standing in his own way (as most of us do).

The contrast is pointed up in his record in the last two USGA Open Championships. In 1957 at Inverness he picked up early in the second round, in sheer vexation and disgust. This year, never allowing anything to ruffle him seriously, he led the field after every round at the Southern Hills Country Club in Tulsa, Okla.

He had, for that tournament, a new-found way of using his inner fire constructively.

And so, regardless of what happened before or after, Tommy Bolt in this year's Open gave golf a most useful and unusual playing lesson. It was as if he had first taken a lesson from the wise Solomon, who saw that "He that is slow to anger is better than the mighty; and he that ruleth his spirit than he that taketh a city" (Proverbs 16:32). Bolt went one better than Solomon and took the city, too.

The 58th Open in the USGA series was another remarkably fine tournament over a remarkably fine course. Those who have known Southern Hills over the years have long regarded it as one of the best of championship courses, and so it was for the Open.

There are a number of criteria of what constitutes a Championship course, and one is whether it provides a test for all shots. Southern Hills caused Tommy Bolt to use every one of the 14 clubs in his bag—three woods and ten irons all the way up to a No. 2, and his putter.

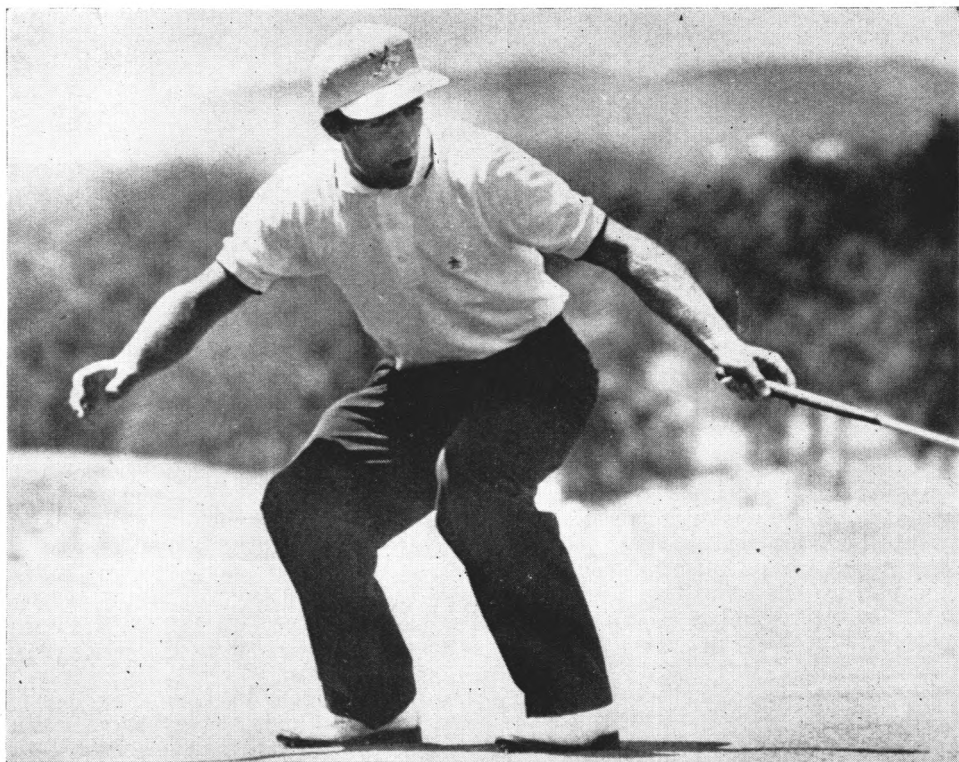
This was the third USGA Championship at Southern Hills, and all have been won by players of marked skill in their respective classes. Mrs. George Zaharias (Babe Didrikson) won the Women's Amateur there in 1946, and Rex Baxter, Jr., took the Junior Amateur there in 1953 as a forerunner to his membership in the Walker Cup Team last year.

Above and beyond the physical facilities and efficiency of planning, Southern Hills provided a warmth of hospitality and friendliness that is often difficult to appreciate in the Open, where the winning of the Championship tends to dominate all else. That things went off so happily was a testimonial to the thousands of hours of devoted volunteer effort put into the preparations by the Southern Hills committee, headed by Philip Taber as General Chairman, with F.G. McClintock, W.K. Warren and R.W. Berry as Vice-Chairmen.

It is a great thing for golf to have the Open conducted under such auspicious circumstances as Southern Hills provided.

Although the weather throughout the tournament was clear, playing conditions were not easy, with temperatures in the 90s and gusty winds of appreciable force.

In view of the test, Bolt made a remarkable performance in scoring 283 for the 72 holes—three over par. His winning margin was four strokes over the runner-up, Gary Player, an attractive 22-year-old



**The brilliant young South African golfer, Gary Player, who has had outstanding success on the professional circuit and who finished second at his first attempt in the Open Championship, urges his putt towards the hole during play at the Southern Hills Country Club, Tulsa, Okla.**

professional from South Africa who was playing in the Open for the first time. Julius Boros, former Champion, was third with 289. Bolt's advantage at the end was the greatest since Ben Hogan in 1953 won by six strokes at Oakmont.

Like Hogan at Oakmont, Bolt did the unusual feat of leading the field in every round. His first-round 71 was tied by Boros and Dick Metz. Then he had another 71, for a 142 total that was one stroke ahead of Player, who scored 68 in the second round. Bolt made his strongest move with a 69 in the first of the two rounds played on Saturday. His 54-hole total of 211 left him three strokes to the good over Gene Littler, whose third-round 67 was the lowest of the tournament. Bolt then closed out with a 72.

If one could fairly pin-point a single hole and aver that this was where Bolt won, it probably would be Southern Hills'

12th. This is a great par 4 of 465 yards whose fairway swings left until a creek interrupts it just in front of the green and then flows to the right alongside the green. Here the field had continuous troubles. Here Bolt scored three birdie 3s and one par in his four rounds.

This was not the first year in which Bolt has been in position to win. Just three years ago he tied for third place in the Open. He has been seventh or better in four of the last eight Championships.

It is interesting to reflect that 20 years ago this summer the USGA Amateur Public Links Championship field had as competitors three young fellows named Tommy Bolt, Ed Furgol and Walter Burkemo. Furgol, like Bolt, has been the Open Champion, and Burkemo has been PGA Champion.

The premium on qualifiers' places for the Open was higher this year than ever

before. There had been a record entry of 2,133—205 more than the previous high.

Low amateur at Southern Hills was Charles Coe, former Amateur Champion, with 295. Ben Hogan, seeking an unprecedented fifth Open title, injured his left wrist in practice and scored 294. The defending Champion, Dick Mayer, had 299. Sam Snead failed to qualify for the last 36 holes—his first such failure in 18 Opens.

There were six rounds of par 70 and six rounds under par in the 428 rounds played in the Championship.

The Open Champion of 50 years ago, Fred McLeod, of Washington, was a spectator.

Spectator attendance was unexpectedly large. Unofficial figures, for both paid and free admissions, were:

First day .....	10,028
Second day .....	10,910
Third day .....	12,375
<b>Total .....</b>	<b>33,313</b>

The all-time total attendance was 39,696, in 1957 at Inverness, with 16,527 the third day.

Here is how the leaders stood at each stage:

#### 18 Holes

Tommy Bolt .....	71
Julius Boros .....	71
Dick Metz .....	71
Lloyd Mangrum .....	72
Frank Stranahan .....	72
Bruce Crampton .....	73
Jimmy Demaret .....	73
*E. Harvie Ward, Jr. ....	74
Smiley Quick .....	74
Labron Harris .....	74
Gene Littler .....	74

#### 36 Holes

Tommy Bolt .....	142
Gary Player .....	143
Frank Stranahan .....	144
Labron Harris .....	146
*Charles R. Coe .....	146
Julius Boros .....	146
Gene Littler .....	147
Jimmy Demaret .....	147
Ben Hogan .....	148
Tom Nieporte .....	148
Bruce Crampton .....	148

#### 54 Holes

Tommy Bolt .....	211
Gene Littler .....	214

Gary Player .....	216
Julius Boros .....	218
Frank Stranahan .....	219
Walter Burkemo .....	219
Don January .....	220
Dick Mayer .....	221
*Charles R. Coe .....	221
Robert A. Rosburg .....	221

#### 72 Holes

Tommy Bolt .....	283
Gary Player .....	287
Julius Boros .....	289
Gene Littler .....	290
Walter Burkemo .....	291
Robert A. Rosburg .....	291
Jay Hebert .....	293
Dick Metz .....	293
Don January .....	293
Ben Hogan .....	294
Frank Stranahan .....	294
Tommy Jacobs .....	294
Billy Casper, Jr. ....	295
*Charles R. Coe .....	295
Marty Furgol .....	295
Robert Goetz .....	296
Tom Nieporte .....	297

\* Amateur.

The winner's total was compiled as follows:

#### BOLT'S 283

Hole	Yards	Par	1st	2nd	3rd	4th
1	459	4	3	4	4	4
2	450	4	5	4	5	5
3	410	4	4	4	4	5
4	371	4	4	3	5	4
5	592	5	5	6	4	5
6	177	3	4	3	3	3
7	401	4	4	4	4	4
8	218	3	3	2	4	2
9	378	4	4	5	3	4
<b>Out</b>	<b>3,456</b>	<b>35</b>	<b>36</b>	<b>35</b>	<b>36</b>	<b>36</b>
10	378	4	4	4	3	4
11	167	3	3	4	3	3
12	465	4	3	3	3	4
13	469	4	4	4	5	5
14	210	3	3	3	3	3
15	410	4	5	4	3	5
16	538	5	5	4	4	4
17	346	4	4	4	4	4
18	468	4	4	6	5	4
<b>In</b>	<b>3,451</b>	<b>35</b>	<b>35</b>	<b>36</b>	<b>33</b>	<b>36</b>
<b>Total</b>	<b>6,907</b>	<b>70</b>	<b>71</b>	<b>71</b>	<b>69</b>	<b>72</b>

# YOUTH VERSUS EXPERIENCE IN CURTIS CUP

Tenth of the Series  
to be Played  
at Brae Burn

When the Brae Burn Country Club, in the Boston suburb of West Newton, entertains the tenth Curtis Cup Match on August 8-9, it will be staging the fourth USGA event in its 61 years' history.

Appropriately enough, the first Championship to be held there was the Women's Amateur of 1906, won by Miss Harriot Curtis, co-donor with her sister Margaret of the Curtis Cup.

In 1919 Walter Hagen won his second USGA Open Championship there before embarking on his British conquests in the '20s.

Brae Burn was the scene of another Anglo-American battle when Robert T. Jones, Jr., successfully staved off the challenge of the reigning British Amateur Champion, T. Phillip Perkins, in the final of the 1928 Amateur Championship by the overwhelming margin of 10 and 9.

And now for the Curtis Cup. In the past the United States has won six Curtis Cup Matches to Britain's two, and the 1936 series at Gleneagles, Scotland, resulted in a tie at 4½ points each.

The match next month will be between a highly experienced British Isles Team and perhaps the youngest side ever to represent the United States.

The Americans are headed by 19-year-old Miss JoAnne Gunderson, of Sand Point Country Club, Seattle, Wash., our reigning Amateur Champion, who will be making her Curtis Cup debut. Other newcomers to the Team will be:

Miss Meriam Bailey, of Inverness Club, Palatine, Ill., the 1957 Women's Western and Collegiate Champion.

Mrs. Les Johnstone, of Mason City Country Club, Mason City, Iowa, runner-up in the 1957 Amateur, Western Amateur, Trans-Mississippi and North and South.

Miss Barbara McIntire, of Tequesta Country Club, Jupiter, Fla., leading amateur in the 1956 and 1957 Women's Opens and the 1957 North and South Champion.



Mrs. Charles Dennehy, non-playing captain of US Curtis Cup Team.

Miss Anne Quast, of Everett Golf and Country Club, Everett, Wash., first amateur in the 1958 Open and the 1956 Western Amateur Champion.

Miss Anne Richardson, of Columbus Country Club, Columbus, Ohio, semi-finalist in the 1957 Amateur, Western Amateur and North and South.

The two former Team members selected are Miss Polly Riley, of River Crest Country Club, Fort Worth, Texas, who has played in all post-war matches, and Miss Barbara Romack, the 1954 Amateur Champion, who played on the 1954 and 1956 Teams.

The USGA Team will be under the non-playing captaincy of Mrs. Charles Dennehy, of Lake Forest, Ill., Chairman of

the USGA Women's Committee and former Canadian Champion.

In contrast, the British Isles will present only two newcomers in its seven-woman Team. They are:

Miss Bridget Jackson, of Birmingham, England, an alternate for the 1956 Team and the 1956 English Champion; and Miss Dorothea Sommerville, of Glasgow, Scotland, the 1958 Scottish Champion. Both gained valuable experience when they toured the Antipodes in 1955.

Other members of the team are:

Mrs. Michael Bonallack, of Thorpe Bay, Essex, England, the former Miss Angela Ward, who played on the 1956 Team and was a semi-finalist in the 1958 British Championship.

Miss Elizabeth Price, of Farnham, Surrey, England, runner-up in the British Championship in 1954 and 1958 and in the English in 1947, 1954 and 1955. She played on the 1952, 1954 and 1956 Teams.

Miss Janette Robertson, of Lenzie, Scotland, runner-up in the 1958 Scottish Championship. She played on the 1954 and 1956 Teams and reached the fifth round of our 1954 Women's Amateur.

Mrs. Frances Smith, of Bootle, Lanca-

shire, England, the former Miss Frances Stephens, British Champion in 1949 and 1954 and English Champion in 1948, 1954 and 1955.

Mrs. George Valentine, of Perth, Scotland, who recently became British Champion for the third time. Her previous titles were won in 1937 and 1955. Mrs. Valentine has also won six Scottish titles, the French Championship and the New Zealand Championship.

Miss Daisy Ferguson, President of the Irish Ladies' Golf Union, will act as non-playing Captain of the visiting Team. Miss Ferguson, a former Irish Champion, captained a British Isles Team against the Commonwealth Teams in 1952 and led a British Team against France and Belgium last year. She lives in Newcastle, N. Ireland.

The 1957 British champion, Miss Philomena Garvey, of Erie, withdrew from the Team, because, it was reported, she declined to wear a Union Jack on her blazer.

Miss Jeanne Bisgood, the 1957 English Champion, declined nomination due to pressure of civic duties.

## 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, 10 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. 25 cents. USGA Slide Rule Handicapper, 25 cents. Poster, 10 cents.

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

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**MISTER CHAIRMAN**, a reprint of a USGA Journal article outlining the duties of the Chairman of the Green Committee. No charge.

**A JUNIOR GOLF PROGRAM FOR YOUR CLUB AND DISTRICT**, a 16-page booklet containing details in organizing and developing junior golf programs at different levels. No charge.

**TURF MANAGEMENT**, by H. B. Musser (Mc Graw-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.

# WHY NO STROKE CONTROL IN USGA HANDICAPS

BY

WILLIAM O. BLANEY  
Chairman,  
USGA Handicap  
Procedure Committee

**I**n our numerous discussions of the new USGA Handicap System, both with individuals and at meetings of handicap chairmen, the question of stroke control invariably arises.

Stroke control is a plan designed to eliminate from handicap computations excessive strokes taken by a golfer on any one hole which have no relation to, or give no indication of, his average or normal playing ability. Such ridiculously high hole scores can be brought about by such things as hitting several balls out of bounds, attempting to play from what amounts to an unplayable lie, carelessness, gambling on shots where there is little likelihood of success, indifferent play.

There are several different names for and methods of obtaining stroke control, but they all have the same basic aim—namely, to reduce an excessively high hole score to a more representative figure, usually a specified number of strokes over par, before the player's score for the round is reported for handicap purposes. The strokes-over-par limit may be the same for all players, or it may be on a sliding scale with the higher-handicapped players having a higher over-par limit than the lower-handicapped players.

No USGA handicap system has ever included a strokes-per-hole control. The USGA does not at present believe such a control either necessary or practical, and its reasons are:

1. A USGA Handicap is based on the 10 best of a player's last 25 scores. Most scores containing excessive strokes on one or more holes will fall among the player's highest or worst 15 scores and therefore will not be used in computing his handicap.

2. A player's USGA Handicap is not equal to the full difference between the average of his 10 best scores and the course rating of the course on which the scores are made. The USGA Handicap

## WORDS OF WISDOM

Charles Evans, Jr., of Chicago, former Open and Amateur Champion, once took eight putts on a green during a qualifying round for the Amateur Championship. Reflecting back to that day in 1921 he says:

"There is a wide margin of distinction between the grimness and determination necessary to win in competition and sheer meaningless anger, which is productive of nothing but subsequent misery. The latter is not only blinding, but one of the most positive elements of defeat.

"We should strive for absolute control of our emotions on a golf course. Never should we be unduly elated at a successful shot and, most certainly, not depressed or angered over a bad one. Calmness, self-control and concentration are three valuable requirements in golf. Cultivate them!"

Differential Chart reduces this difference so that a higher-scoring player is given a handicap equal to but 80% of the difference between the average of his best 10 scores and the 10-best-score average of a lower-scoring player. While this control is intended mainly to balance the greater improvement potential of a high-scoring player, it also tends to compensate for any handicap increase a high-scoring player might receive because a few extra high hole scores are retained in his 10 best totals—it being generally conceded that a high scoring player will have more high hole scores than a low-scoring player.

3. Erratic scoring brought about by infrequent play may cause more high hole scores than usual. When a golfer has fewer than 25 scores posted, the USGA system bases his handicap on a lower percentage of his better scores than the 40% (best 10 of last 25) otherwise used; this somewhat offsets his greater-than-average number of high hole scores.

4. A strokes-per-hole control will reduce the handicaps of poorer golfers more than those of better golfers because the former are not as consistent in their day-to-day play. So if a stroke control plan is added to the other controls mentioned above, it might well reduce the

poorer player's handicap to too low a level.

5. A strokes-per-hole control could reduce the handicaps of many erratic but thoroughly honest golfers to too low a level to permit them to compete equitably in stroke play events. While it is granted that more golf is probably played at match play than at stroke play, the latter type of competition cannot be overlooked in designing a handicap system.

6. A stroke control is not automatic in its adjustments and it must be applied to each individual's score every time he plays 18 holes. Therefore, the control must be operated either by the club handicapper and his committee—a monumental and tedious task, especially at the larger clubs—or by each individual golfer. Most clubs and associations now or formerly using a stroke control plan have left the work in the hands of each individual player. This leaves the results subject to human error, carelessness, indifference, and other human failures. Close observation at a far-western club using a stroke control plan recently disclosed that only about 25% of the members took the time or made the effort to adjust their scores before turning them in. The USGA is of the opinion that if a control, or any other feature, is to become a part of a national handicap system, it should be expected to operate close to 100% efficiently.

7. Even if a strokes-per-hole control could be operated satisfactorily, there is as yet no evidence to show the percentage of players who, as a result of the stroke adjustments, receive a handicap reduction of one, two or more strokes larger than the general average. Therefore, it is quite possible the adjustment control may saddle all golfers with a bothersome procedure which might be helpful for but a very small minority.

8. Many of the arguments in favor of stroke control are based on the actions of a few chisellers who make it a habit of taking an excessive number of strokes on one or more holes per round "for the handicapper." Fortunately for golf, persons of this type are few. Actually they cannot be legislated against because, if they so desire, they can "beat" any handicap system or set of controls. Even if it were possible to devise rules efficient enough to keep handicaps of such people

#### ALL IN THE STATE OF MIND

If you think you're beaten, you are.  
If you think you dare not, you don't.  
If you'd like to win, but think you can't,  
It's almost a cinch you won't.  
If you think you'll lose, you're lost,  
For out in the world you find  
Success begins with a fellow's will;  
It's all in the state of mind.

Full many a race is lost  
Ere ever a step is run;  
And many a coward fails  
Ere ever his work's begun.  
Think big, and your deeds will grow;  
Think small, and you'll fall behind;  
Think that you can, and you will.  
It's all in the state of mind.

If you think you're outclassed, you are;  
You've got to think high to rise,  
You've got to be sure of yourself before  
You can ever win a prize.  
Life's battles don't always go  
To the stronger or faster man,  
But soon or late the man who wins  
Is the fellow who thinks he can.

Walter D. Wintle

at proper levels, it undoubtedly would work to the disadvantage of the honest golfers who represent an overwhelming majority of all players. The chiseler is easily spotted and should be dealt with solely by local committees.

9. Finally, it is the desire of the USGA to make its Handicap System as simple as possible to operate by the greatest possible number of clubs and associations, whether large or small; and to make it as easy as possible for every player in the country to understand. To accomplish this end, practically all the controls embodied in the USGA handicap system are automatic in operation. The only control that is non-automatic, and requires operation by an individual, is the one available to handicappers of arbitrarily reducing the handicaps of players who do not, or will not, turn in all their scores.

As can be seen, the USGA does not approve of any form of stroke control which reduces, for handicap purposes, a player's score on any one hole to a specified number of strokes over par, nor will it sanction the use of a stroke control plan as part of the USGA Handicap System.

A handicap should in time reflect the player's ability, for better or for worse, without major surgery.

# 88 GOLF ASSOCIATIONS ADOPT NEW USGA HANDICAP SYSTEM

The United States Golf Association has received notification from eighty-eight Associations that they are using or recommending the USGA Handicap System which became effective on January 1, 1958. Tremendous interest and satisfaction have been expressed by clubs and associations which are now using it.

One hundred five replies were received from a poll. Of the seventeen associations not yet using or recommending the USGA system, three plan to adopt it next year, one was undecided, one did not answer the specific question and twelve are using other systems.

A typical letter was received from H.W. Kephart, Handicap Chairman, Woodway Country Club, Springdale, Conn., who says:

"I am writing to inform you that the Woodway Country Club will use your new USGA Golf Handicap System.

"Incidentally, this is not new with us because we used the same system last year. For your information, the 40 per cent system worked out very well last season and, I feel it safe to say, most all of our members were more pleased with it than with previous systems used."

Paul A. Hudak of the Pittsburgh Field Club, Pittsburgh, Pa., writes:

"The Pittsburgh Field Club has decided to adopt the new handicap system. We feel that a lot of work has gone into this change-over and are happy to be part of it.

"On the surface it appears to be a fair system and one that will be relatively easy to care for.

"We congratulate you on the fine job you have done in this regard and assure you of any cooperation on our part."

Robert K. Howse, of Wichita, Kan., writing on behalf of the Kansas State Golf Association, says:

"We had a very successful meeting, with most of the golf clubs in the state of Kansas and the state golf association officials, at which time the clubs heartily approved the USGA's course rating and handicap system."

One men's sectional association, 15 men's state associations and 22 men's dis-

## GOLFING PHRASES

**Argumentum baculinum.** — Club law; the local rules.  
**Caetera desunt.** — The others did not hand in their cards.  
**Coup de grace.** — A finishing stroke; a short putt.  
**E pluribus unum.** — A plus man.  
**Enfans perdus.** — Lost balls.  
**In statu quo ante.** — Please replace the turf.  
**Lex talionis.** — Like as we lie.  
**Litera scripta manet.** — No alterations can be made on any card after it has been returned.  
**Nihil fefigit quod non ornavit.** — He takes turf with every shot.  
**Obiter dictum.** — Addressing the ball.  
**Pas de quatre.** — Fourball matches are forbidden.  
**Optimates.** — The scratch men.  
**Requiescat in pace.** — He lies dead.  
**Quo iure?** — What is the Rule?  
**Sic itur ad astra.** — I got too much under that one.  
**Sub poena.** — Under a penalty.  
**Tarde retrorsum.** — Slow back; keep your eye on the ball.  
**Terminus a quo.** — The tee.  
**Ubi jus incertum, ibi nullum.** — Where neither player knows the rule, there is no rule!  
**Ultima Thule.** — The last hole.

Reprinted from "The Stymie"

trict associations have rated their courses or are in the process of doing so. Three state associations and one district association will rate their courses in the near future.

Sixteen women's associations have rated their courses or are in the process, and six others will rate their courses soon.

The interest has not been confined to the United States. During the Planning Conference for the World Amateur Golf Team Championship in May, considerable afterhours time was spent in explaining the system to the representatives. Already the USGA has been informed that the Venezuelan Golf Association has adopted the system and other nations are expected to follow suit.

The three Scandinavian countries, Norway, Sweden and Denmark, which work in close cooperation with one another and run joint championships, have asked for copies of the USGA Golf Handicap System for Men and the Conduct of Women's Golf, along with the accompanying USGA Slide Rule Handicappers, in order to study the system more fully.

Associations which use or recommend the USGA System are:

## **SECTIONAL ASSOCIATIONS**

MIDDLE ATLANTIC  
NEW ENGLAND  
PACIFIC NORTHWEST

## **STATE ASSOCIATIONS**

ARIZONA  
CAROLINA  
COLORADO  
CONNECTICUT  
DELAWARE  
FLORIDA  
INDIANA  
KANSAS  
KENTUCKY  
MAINE  
MARYLAND  
MASSACHUSETTS  
MINNESOTA  
MISSOURI  
NEW MEXICO  
OHIO  
OREGON  
RHODE ISLAND  
TENNESSEE  
VERMONT  
VIRGINIA  
WEST VIRGINIA

## **DISTRICT ASSOCIATIONS**

AKRON  
ALLIED GOLF CLUBS OF  
BERKSHIRE COUNTY (MASS.)  
BUFFALO  
CENTRAL PENNSYLVANIA  
CLEVELAND METROPOLITAN  
DALLAS  
DENVER  
DETROIT  
DISTRICT OF COLUMBIA  
GREATER CINCINNATI  
GOLFERS' LEAGUE  
HAWAIIAN  
HUDSON RIVER (N.Y.)  
JACKSONVILLE (FLA.)  
KANSAS CITY  
MEMPHIS  
METROPOLITAN (N.Y.)  
NEW ORLEANS  
NORTH EASTERN WISCONSIN  
PHILADELPHIA  
RICHMOND (VA.)  
ROCHESTER (N.Y.)  
SOUTH JERSEY  
ST. LOUIS  
SYRACUSE (N.Y.)

TOLEDO  
WESTERN PENNSYLVANIA  
YORK COUNTY (PA.)

## **PUBLIC LINKS ASSOCIATIONS**

NEW ENGLAND  
NEW JERSEY  
SOUTHERN CALIFORNIA

## **SENIOR ASSOCIATIONS**

COLORADO  
CONNECTICUT  
NEW JERSEY  
PHILADELPHIA  
ST. LOUIS  
WOLVERINE (MICH.)

## **WOMEN'S ASSOCIATIONS**

AKRON  
BUFFALO  
CAROLINAS  
CHICAGO  
COLORADO  
CONNECTICUT  
DALLAS  
DISTRICT OF COLUMBIA  
(IN 1959)  
DETROIT  
LOUISIANA  
MASSACHUSETTS  
MINNESOTA  
NEW ENGLAND (IN 1959)  
NEW ORLEANS  
NORTHERN CALIFORNIA  
OLD LADIES' (IND.)  
OREGON  
PACIFIC  
PHILADELPHIA (IN 1959)  
ROCHESTER  
ST. LOUIS  
SOUTHERN CALIFORNIA  
TACOMA  
TEXAS  
VIRGINIA  
WASHINGTON  
WEST TEXAS  
WESTERN  
WESTERN NEW YORK  
WESTERN PENNSYLVANIA

## **FOREIGN ASSOCIATION**

VENEZUELAN

# BOB JONES TO CAPTAIN USGA FIRST WORLD TEAM

Returns to  
Scene of Former  
Triumphs at  
St. Andrews

When the first United States Team sets out for St. Andrews, Scotland, to participate in the inaugural World Amateur Team Championship in October, it will travel under the non-playing captaincy of Robert T. Jones, Jr., of Atlanta. The four players will be selected after the Amateur Championship in September.

In a personal message to the Planning Conference in Washington, D.C., last May, Jones had said in part: "May I assure you and your guests that within the very limited ability of one individual I shall always be eager to help in any way I can."

#### Taken at his Word

The USGA Executive Committee took him at his word and invited him to lead the first Team.

No man is more qualified to captain a Team over the Old Course than Bob Jones. It was there that he won his second British Open Championship in 1927, retaining the title he had won the previous year at Royal Lytham and St. Anne's. It was there that he won the British Amateur Championship in 1930, the first trick of his Grand Slam and the title which had seemed to be the most elusive of all.

Twenty-eight years ago he was the idol of St. Andrews, and he once stated that if he had to play one course for the rest of his life, he would choose the Old Course at St. Andrews.

The role of captain of an international team is not new to Bob Jones. He was leader of the Walker Cup Teams of 1928 and 1930.

After his retirement as a player in 1930, Jones, with several associates, founded the Augusta National Golf Club, in Augusta, Ga. Such a project had long been a dream; Bob Jones and Dr. Alister MacKenzie, the famed Scottish golf course architect, made it a reality. The Masters Tournament, over which Bob Jones has always presided, was inaugurated in 1934,



ROBERT T. JONES, JR.

and through it he has maintained close contact with the succeeding generation of young golfers.

#### Welcome Awaits him in Scotland

Bob Jones is a man of broad interests—he is trained as a lawyer, he is in business, he has several hobbies, and he saw service in World War II—but he has always maintained an abiding interest in golf. He attended the 1953 Walker Cup Match in Marion, Mass., and the 1955 Amateur Championship in Richmond, Va. He can no longer jump the Swilcan Burn, nor is he likely to be carried shoulder high off the course at St. Andrews, but the name of Bobby Jones, as he was always called there, is just as much a household name in Scottish golfing circles as that of Tom Morris or James Braid. No visitor will be more welcome to the home of the Royal and Ancient game.

# HISTORIC GOLF BALL MOLD MAKES UNUSUAL TROPHY

BY

HERMAN GOLDSTEIN  
Golf Writer,  
Cleveland News

Cleveland, Ohio, district professionals compete for a trophy that is unique. The trophy in the Mitchell-Haskell tournament, 18 holes medal play, is the brass mold with which Coburn Haskell developed the first rubber-core golf ball.

Coburn Haskell was a Cleveland industrialist who was married to a niece of the famous U S Senator Marcus Alonzo Hanna.

Joe Mitchell was the first golf professional in Cleveland. He was brought over in 1897 from Berlin where he taught at the Royal Golf Club and reportedly gave lessons to Kaiser Wilhelm.

Both died many years ago.

Haskell played at the original Cleveland Country Club which was on the shore of Lake Erie. The country club moved to the present beautiful layout in 1930 and was the site of the U S Inter-collegiate Championship in 1934 and the Amateur Championship in 1935, both won by Lawson Little.

Mitchell recalled that one day, about 1900, he and Haskell were sitting and chatting on the porch of the clubhouse. Haskell had a tangled bundle of rubber bands in his fingers, twisting them, squeezing them together and bouncing them on the floor when he got the idea to put rubber into the center of a golf ball as a substitute for the old gutta percha.

Haskell went to his friends at the B.F. Goodrich Company in Akron to work out the rubber detail, but perfected the ball in Mitchell's shop.

The old mold moved with Mitchell and the club to the new course, and it was still kicking around when Billy Burke, the 1931 Open Champion, became the head pro at Country in 1934. After Mitchell died, his old friend from Mayfield, Bertie Way, got the idea to honor Mitchell by doing something with the mold.

Another friend, Phil S. Jaeger, once president of the Cleveland District Golf Association agreed to have the mold

## THE KNOCK-OUT

Four and sixty golfers, playing for the cup,  
Going forth so gaily as their names went up,  
Some were caught in bunkers, some with  
nerves askew,  
Four and sixty golfers reduced to thirty-two.

Two and thirty golfers played the second  
round  
Sorry disappointment, many of them found  
Some were driving badly others missed their  
putts  
Two and thirty golfers, half of them went  
nuts.

Sixteen gallant golfers, started out again  
Some were using language, pretty but profane  
In the cruel bunkers, several found their fate  
Sixteen gallant golfers, dwindled down to  
eight.

Eight determined golfers, keen of eye and  
limb  
Started on the tussle, looking rather grim  
All were playing nobly, splendid was the  
score  
Finally successful, was this modest four.

Four excited golfers, semi-final bound  
Fighting for the honor, every hole of the  
round  
Many shots were winners, hooks were very  
few  
Now it's almost over, left to final two.

Two young and dashing golfers, keen and  
birdie bent  
Avoiding all the hazards, to keep them on the  
scout  
Approaching very nicely, close up to the hole  
All depends upon this putt, who will reach his  
goal.  
Now the match is over, handshakes all around,  
They drift along to the 19th, to have another  
round.

T. Cleary,  
Port Moresby, New Guinea  
Reprinted from "Golf in Australia"

mounted and the trophy has been played for since 1939.

In the early years the tournament was open and twice was won by an amateur. In recent years it has been closed to members of the local chapter of the PGA. The present holder is Dick Shoemaker, head pro at Beechmont Country Club, Warrenville, Ohio, who also won in 1952. Burke and Densmore Shute, who won both the British Open and the national PGA titles, are listed among the past winners.

# A MEDICAL VIEW OF GOLFING

BY

DR. JOSEPH B. WOLFFE  
President, American College  
of Sports Medicine

(Observations of Dr. Joseph B. Wolffe, internationally known cardiologist, Chief of Medicine, Valley Forge Heart Hospital, Fairview Village, Pa., and the Wolffe Clinic and Hospital, Philadelphia, as delivered at the International Congress of Sports Medicine in Moscow, May, 1958.)

We initiated studies of golfers, and that sport's possible effects on the heart and blood vessels as far back as the 1920's, when the vogue was taking hold among more prosperous middle-aged businessmen. Our curiosity was aroused when individuals who had started playing golf came to us with an interesting pattern of complaints, revealing a "common profile." They would tell of shortness of breath, tightness in the chest, a feeling of undue fatigue and, paradoxically, inability to sleep well. The symptom pattern was almost identical with the much-banded wartime syndrome of the so-called "soldier's heart."

We found, on examination, no clinical signs of disease to account for the symptoms. Having long been interested in the effect of sports and exercise on the cardiovascular system (heart and blood vessels) we decided to do an on-the-spot study of golfers in action. We went down to New Hope to one of those old-time "cow-pasture" courses, as they were called (6-holers) and spent a few days making before-and-after examinations of our golfers. We had to hire a truck to transport the huge, unwieldy electrocardiographic machine—this was long before the days of the portable ECG—and set it up, with its 20 batteries, in a shack some distance from the course. What we wanted to find out was:

1. Should we stop individuals with the aforementioned complaints from indulging in golf?
2. Were those physicians who advised their unsick patients to "give it up," and "take it easy," correct in giving such advice?
3. What was there about the game which produced the symptoms with which men were coming into our office? Was

the game too strenuous? Was it, in fact, dangerous? What was the urge which impelled them to go in for the sport—aside from wanting to emulate old John D. Rockefeller, and other examples of wealth and success?

We took a leaf out of the book of Sir James MacKenzie—the late, great cardiologist and teacher under whom we studied for a privileged interval in Scotland. We remembered what he observed when studying wartime victims of the so-called "soldier's heart"—which was NOT heart disease in any shape or form, nor was it caused by exertions in combat. The fact was that "soldier's heart" was a phenomenon observed in new recruits who usually saw no combat whatsoever. They were victims of fear, and of too intensive overtraining to begin with. Medical scientists later named the syndrome "neurocirculatory asthenia," and "effort syndrome," with no relationship at all to war or the military life.

The fact is, we see a tremendous incidence of this symptom pattern among civilians in peacetime, but when there is an absence of peace in their personal, social, economic or professional lives. And we see it in individuals who plunge too intensely into strenuous activities for which they are not properly prepared or conditioned.

When the recruits were given re-training, on a graduated plane, they were, in most instances, successfully rehabilitated and made capable of full-scale duty as soldiers.

So it was with our golfers. They were, in many instances, like horses taken out of the stable after a long, inactive winter, and put to the plow too soon. We found that when they applied themselves gradually to judicious increases in physical

activity, playing a little the first day, a little more the next time, and so on, that they began to be liberated from their symptoms, especially from the fears which the first symptoms engendered, triggering a chain of fears and concomitant symptoms that brought them scurrying into the doctor's office.

The urge to indulge in golf also presented a common profile. They seemed to have almost a compulsion to get out into the open, to be liberated from the confined environment and from the shackles of daily discipline imposed by business responsibilities, an imprisonment which tended to weaken them, make them feel flabby, feeble, with impairment of mental vigor, too. The urge to get out and play golf, it became clear to us, was an expression of the "wisdom of the body" demanding it, and mesaging the brain accordingly.

My associates and I accompanied the golfers along the course, in addition to examining them. We found the following:

1. After several weeks of graduated play, the heart rate became stabilized, and began to respond normally to effort. We concluded—and our subsequent studies have confirmed this in ordinary everyday golfers, and in champions as well—that golf has a beneficial effect on the heart and blood vessels; it serves as a mild massage for the heart muscle, and the interrupted walking helps, over a period, to put the many unused capillaries to use, thus improving the circulatory capacity.

2. The pain in the chest of which our golfing patients complained was not really angina pectoris, but rather the result of utilizing chest-wall muscles previously not used, occasioned by the swinging of the club, and the unaccustomed deep breathing and expanding of the chest cage. The pain disappeared after a few weeks of graduated exercise on the golf course.

Golfing tends to strengthen the muscles of the back, and improves posture. A feeling of increased pride in appearance, together with a sensation of well being makes many a golfer a regular devotee of the game.

4. In instances of elevated blood pressure, of the uncomplicated type, the higher blood pressure due to nervous ten-

sion, tended to become stabilized on a normal level as weeks of playing passed.

5. The mere assurance that they could play helped to relax tension and fear among the frightened golfers we saw in those early days.

Our observations consistently show benefits from the game, provided the objective in playing is not competitive. We have had occasion to tell golfing patients that if they have to bet on every hole and every game they play, they are safer in a poker game than on the golf course. The compulsive player who is in a constant dither over his dissatisfaction with his game, who simply must win, not only gets no benefit from the game, but may do himself injury. Intense rivalry on the golf course offers no relief from the marketplace. Competition is fine in its place, but it is far more desirable that men should compete to improve, not to prove.

Golf is a sport that is not designed to increase strength, as such. It is a game that is highly recommended for relaxation, and for the development of endurance—endurance, not for extraordinary tasks beyond the need of the individual, but for the everyday demands of living happily and productively. Golfing, consistently, over a prolonged period, should make a man fit enough to be able to walk up several flights of stairs, when the elevator goes out of whack, and not need to be carried up by the porter.

(In this connection, Pres. Eisenhower's compulsion to go out and play golf no matter what else may be going on in the world has its points. It is the wisdom of his body crying for liberation and relaxation. It is to be hoped, however, that his practice of being motor-driven from lie to lie and from hole to hole, does not become a national fad, inasmuch as the walking on the golf course is a major benefit of this form of sport.)

Chief regions of the body which benefit from golf, in addition to the back muscles, are the legs. There is a measure of benefit also for the abdominal muscles and for the arms and shoulders. The entire muscular system, however, gets the advantage of moderate exercise.

We have investigated cases of individuals who have dropped dead on the golf course, or who have died or taken

(Continued on page twenty-two)

## **JUNIORS ACCEPTED AT MINNESOTA COURSE**

Varsity Pro,  
Les Bolstad,  
A Friend of Youth

**L**es Bolstad will be in his element when the USGA Junior Amateur Championship is played at the University of Minnesota Golf Course, St. Paul, Minn., at the end of this month. Bolstad is the course professional, team coach and instructor in the University's physical educational program.

Les Bolstad loves young folk and gave up a position with a private club to return to his alma mater in 1947 to devote his life to the golfing welfare of the students.

Whether he is initiating beginners in group instruction or coaching the top-notchers in the finer points of the game, he is heart and soul in his job. The proof of his teaching lies in the fact that his former pupils include Misses Patty Berg, Beverly Hanson, Mary Lena Faulk and Mickey Wright.

In returning to the University of Minnesota, Bolstad completed a cycle which began at the age of 11 when he used to caddie at the old University course. He entered its portals as a freshman in 1925, and as a sophomore in 1926 won the USGA Amateur Public Links Championship. The following year he was instrumental in reviving golf as a competitive sport at Minnesota and in 1929 helped the University win the inter-collegiate team title.

Golf at the University dates back to 1914 when its then President, Loftus D. Coffman and Dean J.M. Thomas, along with two other members of the faculty, laid out a nine-hole course. They formed a group to purchase the property and run it as a club, but three years later it was found to be too expensive so they sold their interests and moved to nearby Midland Hills. Here, another nine-hole course was laid out and the group struggled along for a few years until the course passed into the hands of a private owner.

In 1927 the University bought back the course and the clubhouse and engaged a pro-manager. Shortly after this it pur-



**LES BOLSTAD**

chased an additional 40 acres adjacent to the course for its farm school, which later became the course's second nine.

The course, as it stands today in rolling, heavily wooded terrain, is one of the most interesting in the Minneapolis area.

The University has more than 26,000 students, and each is at liberty to play as much golf as he or she wishes, free of charge.

Last year's Junior Amateur Champion, Larry Beck, of Kinston, N.C., is now over the age limit of 18, and so a new Champion must be crowned. The runner-up, Dave Leon, of Tucson, Ariz., is also ineligible to compete again. However, two of last year's semi-finalists, Richard Casabella, of Louisville, Ky., and Marion C. Methvin, of Little Rock, Ark., will again be contenders. Each will be making his final appearance; for Methvin it will be his fourth attempt.

Kenneth Finke, of Tucson, Ariz., and Jon Hoffman, of Windom, Minn., both now 17, were quarter-finalists in 1957, and remain eligible.

# GOLFING THROUGH SOUTH AMERICA

BY

ALLAN BROWN  
Ekwanok Country Club,  
Manchester, Vt.

We asked the travel agency to plan a trip to South America that was flexible. We told them we did not want to follow a package tour, for if we found a place we liked and wanted to stay an extra week, that is the way it was to be.

Furthermore, if there was a choice between staying in a city or living in the country, we preferred the latter; especially if it were near a golf course.

We were told to stand by as steamship reservations were tight, and that perhaps by the first of February there would be something available.

We were seated in front of a log fire in a ski lodge in Vermont on New Year's Day watching the Rose Bowl game on TV when a long-distance phone call from our agent informed us that we could leave in three days if we could be ready by then.

We said, "It's a deal," and thus began a four months' adventure through South America, a trip that included:

A visit to the land of the ancient Incas of Peru.

A flight over the Andes to the headwater of the Amazon and its steaming jungles.

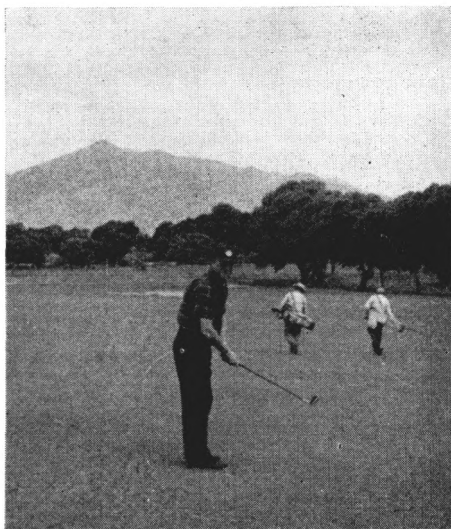
Brief calls at desert-like ports of Peru and Chile where we watched loading of copper and nitrate.

Several days' journey by motor and steamers through the magnificent lakes of Southern Chile and Argentina with their spectacular scenery and fabulous fishing.

And, finally, several weeks of sightseeing and adventure along the East Coast with its enormous cities and rapid tempo of life.

But, of all our experiences, the golf courses of South America were the most rewarding, not for the game of golf alone but because it gave us an opportunity to meet people and learn about the customs of the countries we visited.

We were armed with a letter of introduction to the secretaries of the golf



The third hole at Los Incas Country Club, an hour's ride from Lima, Peru.

clubs of South America, suggesting very subtly that the privileges of the club be extended to the bearer and his wife.

As the letter was in English and our knowledge of Spanish and Portuguese was "un poquito", we had some very amusing experiences getting the privilege to play, not because of the officials or the members of the clubs but because of the difficulties in surmounting the language barrier.

We found the people of South America, particularly those connected with golf, to be extremely courteous and most cooperative.

It is naturally to your advantage to have a working knowledge of the language of the country you are going to visit, but if this is not possible, you will still find a royal welcome in the lands south of the border.

Perhaps a description of one experience which was typical of many will suffice, particularly if we reverse the scene

## USGA FILM LIBRARY

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

"Golf's Longest Hour," a 16 m.m. full color production running for 17½ minutes depicting 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 16 m.m. color production, running for 16½ entertaining minutes in which Johnny Farrell, the Open Champion of 1928, acts as intermediary between Wilbur Mulligan, a beginner of unimpeachable integrity, and Joshua P. Slye, 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.

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

"The Rules of Golf—Etiquette" also has proved popular. The film 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 16 m.m. color production, the film has a running time of 17½ minutes.

The distribution of all five 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.

and use your favorite club as the location.

Assume it is Saturday noon—you are seated with your four-ball group in a crowded grill room, hastily finishing your luncheon in anticipation of the afternoon round.

The secretary of the club steps to the door and calls for attention: "Does anyone in the room speak Portuguese?" There is a moment of complete silence, followed by a waiter's voice—"I served on a Portuguese freighter many years ago. I remember a little of the language."

So the waiter leaves his station, neglecting five tables of diners, while he proceeds to the front office to act as interpreter to a strange couple from a foreign land.

To complicate matters, the couple have no golf clubs preferring to travel light, and have brought only their golf shoes and a change of clothing.

After trading ungrammatical bi-lingual phrases with the waiter, the couple finally made it known that they would like to play the course of this nice private club. They would also like to rent some clubs and purchase some balls.

We ask in all fairness: What would be the result of such an incident in your club?

In South America, not once were we turned down. On the contrary, we were treated with the utmost courtesy, and, best of all, we made a host of new friends through these casual introductions.

We were invited to their ranches for week-ends or to dinners in their city homes. We were even urged to stay over a few days to participate in coming golf events.

We also added considerably to our knowledge of Spanish and Portuguese.

Right here I should mention the problem of transportation in South America. It is the same in almost every country, so we need not make any exceptions.

Motor cars cost a fortune; a new Ford or Chevy will range from \$10,000 to \$12,000. This is due to high import duties, transportation charges, taxes, commissions and registration fees, etc.

This means that the great majority of the public have to depend upon public conveyances.

Taxis, which are mostly second-hand cars, are relatively few in number.

If you want to go from your hotel to the golf course, which in many large cities is over an hour's ride, it is best to have the taxi wait for the return trip. Otherwise, you may find yourself stranded miles from town.

Although rates are much lower than in the States, the total charge may be considerable.

It is also best to check with the club beforehand so that you do not find yourself in the middle of the club's annual championship or the Ladies' National Amateur contest.

Monday is irrigation day. Most courses are closed to play, for this is the day the greenkeepers water the courses.

In Peru and Chile, this is done by flooding the course. Small mountain



**The Granadilla Country Club, Vina del Mar, Chile, a hilly course laid out on a mountain ridge overlooking the sea, is one of the most interesting on the West Coast. This view of the short seventh hole shows the green in the hollow guarded by a creek, trees and unseen bunkers.**

streams that flow from the top of the Cordilleras across the barren coastal plains to the ocean are the source of water, as it very seldom rains in this part of the country. The streams are diverted into sluice ditches along the fairways and boards are used to direct the flow of water where needed.

Most of the fairways are a tough, broad-leaf grass similar to bermuda, and the greens are a combination of native bents rather wiry in texture.

They have a weed similar to our clover called "bear's ears" or "mouse ears" that frequently invades the greens and is quite difficult to eliminate.

On one course the caddie advised me not to hunt for my ball in the deep rough. "Snakes," he said. I asked, "What kind of snakes?" "Coral," he replied!

I quickly retreated from that area and dropped another ball, for I recalled what the guide had told us at the famous Butantan Institute in Sao Paulo. They have yet to find a satisfactory serum or antidote for a poisonous coral. They have a

favorite saying in Brazil. If you are bitten by a coral, you have five minutes to convince St. Peter that you should be allowed through the pearly gates.

There is another course where they have had difficulty with some of the older caddies. They have a habit of placing small wagers on their "players," and some have developed large toes which are capable of lifting a ball out of the rough and neatly depositing it on the fairway without anyone being aware of it. The club had recently posted a notice in the caddie house that from here on all caddies must wear shoes.

The land on which one private course is located is owned by the city and occasionally becomes involved in politics. Recently the mayor declared the course closed to its members on Sunday and opened up to the public as a park. Eighteen guards, one to each green, are employed to keep the picnickers from damaging the putting surface.

What we thought was a new ball in a trap turned out to be a hard-boiled egg

from the picnic the day before.

While playing a course in Brazil, we put a tee shot on a par 3 hole six inches from the pin. We were puzzled when the caddie said something that sounded like bum shot, until our opponent explained that "good" in Portuguese is "bom."

Another course had a quaint custom that might be adopted in the States where extra money is needed. If a member wishes to make a substantial contribution to the club's treasury or give some extra fine prizes for the annual championship, he or she has his name embroidered on one of the flags.

This has some interesting possibilities, particularly when reviewing the day's play at the 19th hole. Instead of saying you had one over par at the brook hole, you could say you bogeyed Senor Alvarez, or you might describe how you slashed your way down the middle of Mr. Chumley.

Organized golf in South America is still in the early stages of development. There is nothing comparable to the Green Section of the USGA, although everyone recognizes the need for a program of this kind.

I know the people who are concerned with the upkeep of their clubs would welcome an exchange of ideas and information from the States.

The Asociacion Argentina de Golf represents some sixty-five clubs. Its principal function is to maintain a uniform

handicap system and supervise the more important tournaments. Since my return I hear that Venezuela has adopted the USGA Handicap System.

Exchange visits of leading amateurs and professionals as participants in the national tournaments would help promote friendly relations with our neighbors to the south of us.

In the interest of the work of the USGA Green Section, we took every occasion to discuss the problems of golf course maintenance and to learn how clubs are run in South America. We found a keen desire to exchange experiences and ideas.

I am particularly indebted to R.B. Grasty, a member of both Los Leonas and Prince of Wales Clubs in Santiago, Chile; Louis A. Abarrio, the professional at Llao Llao; Anibal Vigil, Editor of the Argentine Golfer; Luther H. Koontz, a leading golf architect of South America; Charles Burroughs of San Isidro Golf Club; Horace Vignoles, President of Asociacion Argentina de Golf; K.R. Gordon Davis, Captain of Hurlingham Golf Club; Raul J. Pinto Borges, a scratch golfer of Sao Paulo; the famous Brazilian professionals, the Gonzalez brothers; Walter Ratto and Seymour Marvin of Gavea; Charles Johnson, Captain of Itanhangá Golf Club, and last, but not least, to Frank Linder, my delightful golfing companion and host from Rio de Janeiro.

To all of you, a toast—Salud, y'Pesetas y'amor, y' tiempo, para gozarlos.

## A MEDICAL VIEW OF GOLFING

(Continued from page seventeen)

sick in the locker room after the game. Through case histories obtained from physicians and families, we have learned that golf, *par se*, did not cause death or illness, as far as we were able to determine. Those who died in the game almost invariably had previous conditions which had not been reported, or they had ignored earlier warnings.

We have seen more instances of coronary attacks among men sitting at the horse races than among athletes or physically active individuals who indulge regularly in sports. Those who have become ill in the locker rooms of the country club following a golf game, often suffer those attacks from eating and drinking too much, rather than from playing

too much.

Our observations are based on studies over many years, of athletes in many types of sports, of amateurs and many of championship caliber. We have studied marathon runners, swimmers, golfers, etc. We have never known an individual who has suffered heart or blood vessel injury as a result of sports as such. On the contrary, everything we have observed over three decades of studying both the sick (the unfit) and the well, up to the athlete who is SUPERFIT, has convinced us that exercise and physical activity, for play rather than for display, is an inhibitor of aging, a prophylactic against many of the ravages of disease associated with advancing age, and a most useful therapeutic procedure for many forms of a once disabling disease.

# THE HANDICAPPER

Decisions by  
The USGA  
Handicap Committee

Example of symbols: "58-1" means the first decision issued in 1958. References: "Men" and "Women" relate respectively to the USGA Golf Handicap System for Men and The Conduct of Women's Golf.

## Nine-Hole Handicaps For Nine-Hole Players

USGA Handicap Decision 58-1  
References: Men - Section 10-1d  
Women - Section 20-1d

**Q.1:** What is the USGA policy concerning use of 18-hole handicaps in nine-hole events (both match and stroke play), and vice versa?

**A.1:** Handicaps computed under the USGA Handicap System are 18-hole handicaps, and should not be halved for nine-hole play. The reason for this is that if the two nines of an 18-hole course are not of equal playing difficulty, a player using one-half of his 18-hole handicap would be under-handicapped on the harder nine and over-handicapped on the easier nine. If the two nines are of equal playing difficulty, as probably would be the case on a nine-hole course played twice, players with 18-hole handicaps that are in odd figures (such as 11, 17, 23) would have an advantage if the fraction resulting from halving their handicaps is counted as a full stroke, or they would be at a disadvantage if the fraction is eliminated from consideration.

It is suggested that nine-hole handicaps be computed for use in nine-hole events. They should be based on the course rating (playing difficulty) of the nine holes on which the scores are made. If one nine of an 18-hole course is harder than the other, scores made on the harder nine should be handicapped on the playing difficulty of that nine. The same principle applies to 18-hole scores, where, for example, the rating of one course may be 73 and of another course 68.

A nine-hole handicap should not be doubled for 18-hole play, nor should an 18-hole handicap be halved for nine-hole play.

**Q.2:** If only 18-hole handicaps are available and a nine-hole match is to be played, how should the allowance between the players be determined?

**A.2:** Lacking information on which to assign each player a nine-hole handicap outlined in A1 above, it is suggested that the total of each player's 10 lowest 18-hole differentials (on which his 18-hole handicap has been based) be divided by 2 and the resulting figure be applied to the USGA Handicap Differential Chart. Convert fractions of .5 to the next higher whole number.

Example:

Total of player's 10 lowest 18-hole differentials .....	315
Divided by 2 .....	157.5
Convert to .....	158
Applied to Chart gives a nine-hole handicap of .....	14

If the total of the 10 lowest 18-hole differentials is not available, it is suggested that all the differentials that would give the player his 18-hole handicap be averaged, the average be divided by 2, and the resulting figure applied to the USGA Handicap Differential Chart to obtain his nine-hole handicap.

Example:

Differentials for player's 18-hole handicap of 26 from 307 to 318	
Average .....	312.5
Divided by 2 .....	156.25
Convert to .....	156
Applied to Chart gives a nine-hole handicap of .....	13

After each player has been assigned a nine-hole handicap, the allowances for the type of event to be played shall be determined in accordance with Section 10-2, 10-3 or 10-4 in the USGA Handicap System for Men.

For players with fewer than 25 differentials posted, follow procedure outlined in Section 6-2.

PLEASE NOTE: Regardless of how determined, a nine-hole handicap is strictly for local use and shall never be called a "USGA Handicap."

## **Nine-Hole Handicaps On USGA Slide Rule**

Handicap Decision 58-2

References: Men - Section 6  
Women - Section 16

**Q:** On the USGA Slide Rule Handicapper, if the figures in Columns A and B were halved, as well as the handicaps, would we have a good working system for nine-hole handicaps? If not, what figures would you suggest?

Question by: H. DUDLEY DARLING  
Juniper Hill Golf Course  
Northboro, Mass.

**A:** The USGA Slide Rule Handicapper can be used as is to obtain either 18-hole or nine-hole handicaps. For an 18-hole handicap, use the 10 lowest 18-hole differentials; and for a nine-hole handicap, use the lowest nine-hole differentials.

The rules for computing the handicap of a player with fewer than 25 differentials apply equally to 18-hole handicaps and nine-hole handicaps.

For your information, a USGA Handicap is determined by multiplying the average of the lowest 10 of a player's last 25 handicap differentials by 80%, and then adding one stroke, discarding fractions of less than .5 and converting fractions of .5 or more to the next higher whole number. This computation formula, in effect, means that in a match between two players of unequal ability, the poorer player receives a handicap equal to 80% of the difference between the 10-best-score averages of the two players.

PLEASE NOTE: An 18-hole handicap shall not be halved for nine-hole play, nor shall a nine-hole handicap be doubled for 18-hole play.

## **18-Hole Handicaps Requires 18-Hole Scores**

Handicap Decision 58-3  
Section 4

**Q:** May a USGA Handicap be computed from nine-hole scores?

**A:** No. Scores used in computing USGA Handicaps must be 18-hole scores made when the 18 holes are played in immediate succession; a nine-hole course must be played twice in immediate succession.

## **Women Playing off Men's Tees Require Separate Rating**

Handicap Decision 58-4

References - Men: Section 18-1  
Women: Section 27-1

**Q:** What would be an equitable adjustment for a woman shooting from men's tees and being handicapped from women's course rating? We have several women here who play with their husbands and other men and shoot from men's tees, and these ladies have asked me to get a ruling.

Question by: MRS. HERBERT STAATS,  
Chairman, Course Rating Committee,  
Women's Southern California  
Golf Association.

**A:** The only equitable way to handle this is to have your Women's Association establish a separate rating for the course from men's tees. This rating, when deducted from a woman's score, will provide the proper handicap differential to be entered into her scoring record.

## **Status of "Penalty" Handicaps**

USGA Handicap Decision 58-5  
References: Men - Section 8-3b  
Women - Section 18-3b

**Q:** It appears that lowering a handicap on a player's certificate or card as a penalty might at times allow him to enter events for which he would not otherwise be qualified. Should the penalty be reflected on the local handicap board for inter-club matches only?

Question by: GARLAND R. JONES  
Chairman, Handicap Committee  
Elizabeth Manor Golf & Country Club  
Portsmouth, Va.

**A:** Such a handicap should be acceptable for all competitions unless the local committee has a rule to the contrary.



# Better Turf for Better Golf

# TURF MANAGEMENT

## from the USGA Green Section

### Some Effects of Gibberellic Acid on Turfgrasses

By FELIX V. JUSKA

(Research Agronomist, U. S. Department of Agriculture, Beltsville, Md.)

Gibberellic acid, a plant growth substance, is known to promote the growth of a wide variety of plants including grasses. The gibberellins, of which gibberellic acid is the most common, are isolated culture filtrates of the fungus *Gibberella fujikuroi*. This fungus causes a disease of rice seedlings in many countries of the Far East and in Italy. A characteristic early symptom of the disease in rice is an elongation of the shoot so that the diseased plants are spindly and much taller than the healthy ones. In advanced stages of the disease, some of the lower tissues of the seedlings become weak and may die. The crystalline material causing many symptoms characteristic of the disease was first isolated by Japanese workers in 1939 from a liquid portion of the culture medium on which the fungus was grown. Gibberellic acid is produced commercially by growing the fungus in a culture medium. The process is somewhat similar to that used in the production of antibiotics such as penicillin. Gibberellic acid in pure form is not readily soluble in water; therefore, water soluble formulations generally contain a water miscible solvent or the acid is converted to a water soluble salt form.

Outside of Japan, experimental work with gibberellic acid was delayed by language barriers and war, and it was not until 1951 that the U. S. Department

of Agriculture resumed work with gibberellic acid. It shows promise as a growth regulator since it stimulates overall plant growth at extremely low concentrations while high amounts generally show slight to severe adverse effects of over-stimulation and weak plants. The action of gibberellic acid, therefore, is different than that of 2,4-D which is highly toxic at greater concentrations. Gibberellic acid in its dry form as an acid or as a potassium salt of the acid (Potassium gibberellate) is apparently fairly stable. Once dissolved, the material should be used within a week or two because it will gradually lose its growth stimulating properties.

Probably the greatest plant response to gibberellic acid is stem elongation or distance between the nodes of the plant stem. Research conducted at the various Agricultural Experiment Stations indicates that it may help plant growers in several ways, depending upon the crop being grown. With some crops gibberellic acid treated seed may emerge earlier. It may promote more rapid seedling growth; however, rate of root growth may be reduced where stem growth has been greatly stimulated (3). On many ornamental plants, gibberellic acid may be applied in a lanolin paste. A small amount of the acid is dissolved in the lanolin and stirred thoroughly to form a paste which can



The effect of gibberellic acid in promoting the growth of Kentucky bluegrass. Starting in the foreground (directly behind the sign), rectangular plots were sprayed July 17, 1957, with solutions containing 10, 0, 50, 0, 100, 0, 250, 0, and 500 ppm of gibberellic acid, respectively. Photograph taken August 6, 1957.

be applied just below the growing point of the plants. Perhaps a more common method is to apply gibberellic acid as a foliar spray. For experimental purposes various ranges in parts per million (ppm) of gibberellic acid can be readily applied. For grasses, 1 to 2 ounces per acre of gibberellic acid (equivalent to 100-200 ppm when 100 gallons of water are applied) are generally effective. Since gibberellic acid is a growth regulator or growth inducer and not a plant food, it will not replace fertilizer. In fact, it is thought that more fertilizer will be needed to produce balanced growth when gibberellic acid is used.

#### Treatment of Merion and Kentucky Bluegrass Seed

Bluegrasses are relatively slow to germinate, therefore, a chemical hastening seed germination by several days would be valuable in the establishment of turfgrasses. Rapid germination would provide faster coverage, decrease erosion

and enable grass seedlings to compete more favorably with weeds.

Seed of both Merion and Kentucky bluegrass received the following treatments: (a) untreated—dry seed; (b) control—soaked in water; (c) 0.1% dust of gibberellic acid; (d) 1.0% dust of gibberellic acid; (e) 5 ppm, 10 ppm, 50 ppm, 100 ppm and 500 ppm of gibberellic acid.

Water and gibberellic acid treated seed were soaked for 24 hours prior to planting on March 28, 1957. Observations taken after germination began indicated that the water soaked seed germinated as soon as the seed treated with various concentrations of gibberellic acid. Dry seed (untreated) and seed treated with gibberellic acid dust did not show any difference in time of germination. Seed soaked in both water and gibberellic acid germinated 2-3 days earlier than dry seed. Other workers (1) found water and KNO<sub>3</sub> treatments on Kentucky blue-

grass equal to or superior to gibberellic acid. Growth after emergence was not affected by gibberellic acid treatments; apparently, gibberellic acid dissipates rather rapidly in moist soil.

**Effect of Gibberellic Acid on the Growth of Bermudagrass, Bentgrass, and Zoysiagrass Stolons**

Golf course superintendents and others using vegetative material for the establishment of turf are tremendously interested in obtaining rapid cover for new turf areas such as greens, tees and fairways. With this thought in mind stolons of bermudagrass, bentgrass and zoysiagrass were soaked 24 hours in water only or in solutions containing 5 ppm, 10 ppm, 50 ppm, 100 ppm and 500 ppm of gibberellic acid. Measurements of stolon growth were taken six times during a period of twenty-two days following treatment. (Table 1)

**TABLE 1**

**Response of Bentgrass, Bermudagrass and Zoysiagrass Stolons to Gibberellic Acid Treatments Under Greenhouse Conditions.**

**Average increase in length of stolons (centimeters)**

Treatments	Cohansey Bentgrass	U-3 Bermuda	Meyer Zoysia
Water	10.4	14.5	.3
5 ppm	13.7	6.8	.5
10 ppm	15.4	12.7	.5
50 ppm	19.0	15.4	.9
100 ppm	16.2	24.0	1.1
500 ppm	9.5	31.4	-1.2

Stolons were soaked for 24 hours before planting. Growth period: March 29-April 20, 1957.

Growth of Cohansey bentgrass increased with each concentration of gibberellic acid to 50 ppm, after which, the increase in the growth of stolons began to decrease. Treatments of 500 ppm reduced the growth of stolons below that of the control. The 50 ppm treatments increased the length of stolon growth approximately  $\frac{1}{3}$  over the control. U-3 bermudagrass, with the exception of the 5 ppm treatments, showed a continuous increase in stolon growth through the entire range of treatments and the rate of growth for bermuda was more rapid than bentgrass at higher concentrations. Meyer zoysia stolons used for this experiment showed very little response to gibberellic acid. The 500 ppm treatments increased growth of stolons only .9 cm over the controls. This may be due to the fact that the zoysia species are much slower to become established from stolons than either bermudagrass or bentgrass.

To test further the response of bermuda, bent and zoysia grasses to gibberel-

**COMING EVENTS**

- July 14  
Oklahoma Turfgrass Association Field Day  
Stillwater, Okla.  
Dr. Wayne W. Huffine
- July 16  
Texas Turfgrass Association Field Day  
College Station, Texas  
Dr. Ethan C. Holt
- August 4-8  
Annual Meetings American Society of Agronomy  
Purdue University, Lafayette, Ind.  
L. G. Monthey  
Executive Sec., Madison, Wis.
- August 26  
Rutgers University Turfgrass Field Day  
New Brunswick, N. J.  
Dr. Ralph E. Engel
- September 3, noon to September 4, noon  
Penn State Turfgrass Field Days  
University Park, Pa.  
Prof. H. B. Musser
- September 11-12  
University of Rhode Island Field Days  
Kingston, R. I.  
Dr. Jesse A. DeFrance
- September 30  
St. Louis Field Day  
Clayton, Mo.  
Leo S. Bauman
- October 15-16-17  
Central Plains Turfgrass Conference  
Manhattan, Kans.  
Dr. Ray A. Keen

lic acid, 4 inch plugs of each species were planted in replicated plots in the field. The plugs were planted in June and allowed to become well established before treatments were applied in July. Treatments included a control, 10 ppm, 50 ppm, 100 ppm, 250 ppm and 500 ppm of gibberellic acid. The first application was made on July 17, 1957.

An application of 10 ppm gave a decided increase in growth of bentgrass over the control; whereas, considerable etiolation and yellowing began to appear at 50 ppm. Concentrations over 50 ppm affected bentgrass adversely causing thin, anemic growth. Growth of Meyer zoysia was not stimulated except at high concentrations in which case the zoysia plant grew taller and the leaves became more yellow. Zoysia plants which received 500 ppm of gibberellic acid were  $2\frac{1}{2}$  times taller than the controls; however, there was no apparent increase in stolon extension. At the higher concentrations, zoysia stolons no longer grew prostrate but began to turn upward exhibiting a geotropic reaction. Reversal of the upward growth of stolons occurred later in the season. California workers (5) have reported that gibberellic acid applied to zoysia vegetative material did not improve the rate of turf establishment.

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Georgia Florida Turf Association	Winter Park, Fla.
Metropolitan Golf Writers Association	Manhasset, N. Y.
National Golf Fund, Inc	Dunedin, Fla.
Bernard H. Ridder, Jr.	Duluth, Minn.

U-3 bermudagrass responded to gibberellic acid somewhat similarly to Meyer zoysia with respect to top growth, although geotropism of stolons was not observed. The high response of bermudagrass stolons to gibberellic acid obtained in the greenhouse was not evident in the field; moreover, a concentration of 500 ppm inhibited growth of bermuda selections.

A pronounced growth response was obtained in Kentucky bluegrass by treating with gibberellic acid. Increased growth, yellowing and etiolation were roughly proportional to the concentrations applied. The effect of gibberellic acid on Kentucky bluegrass was observed in three to four days and was still evident three months after treatment.

Leben (2) obtained an increase in both fresh and dry weight of Kentucky bluegrass clippings treated with gibberellic acid especially when it was used in conjunction with fertilizer. For pasture purposes, an increase in forage production is important; but for turf purposes, it may be of questionable value. Once a dense turf is established, it would be preferable for lawn purposes to have grass grow slowly in order to decrease maintenance costs.

Field tests indicate that gibberellic acid may be useful for inducing the growth of some grasses in the fall and again in the spring. Gibberellic acid has been used successfully in Michigan (4) in the spring to induce growth in bluegrasses and bermudagrasses when growth would not have otherwise occurred. Bermudagrass was dark green within 10 days when treated on April 16, 1957, with 2 ounces of gibberellin per acre.

Gibberellic acid may prove to have a place on golf courses where it could be used to enable play to start earlier in the spring and to extend play later in the fall. However, the effect of gibberellic acid for breaking spring and fall dormancy has not been well established.

#### Summary

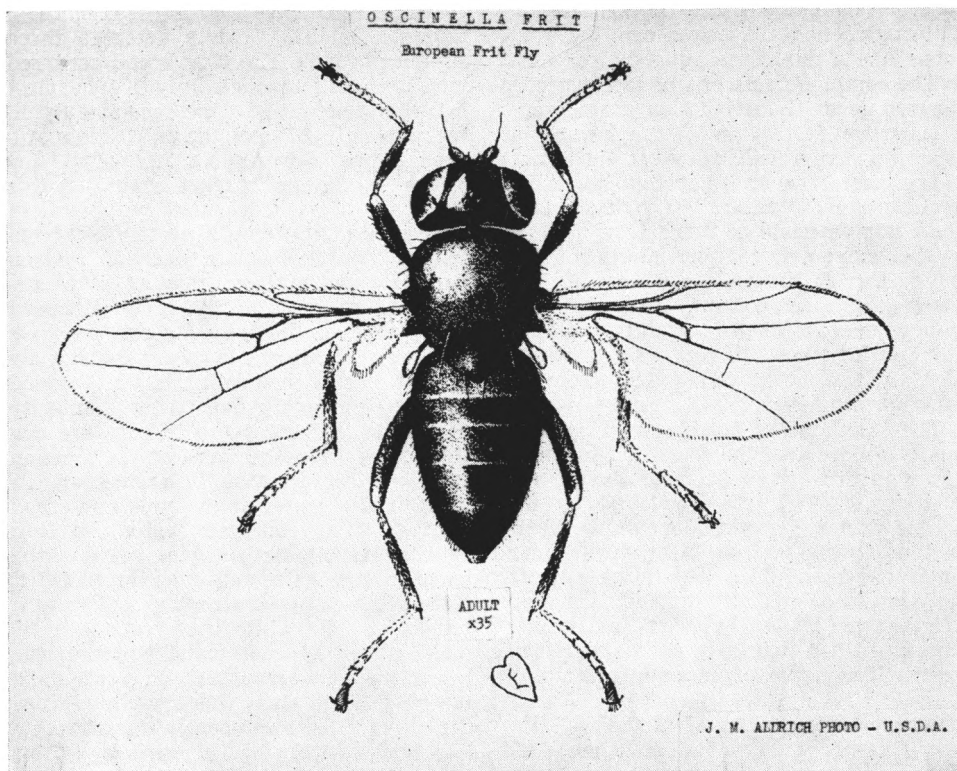
Merion Kentucky bluegrass and Common Kentucky bluegrass seed were treated with various concentrations of gibberellic acid. Seed treated with gibberellic acid did not germinate earlier than the control, nor was subsequent seedling growth more rapid.

Stolons of bentgrass, bermudagrass zoysiagrass were soaked for 24 hours in different concentrations of gibberellic acid. In the greenhouse, bentgrass was most responsive followed by bermudagrass. Zoysiagrass responded very little to gibberellic acid treatments.

In the field, the best growth of bentgrass was observed at 10-50 ppm; above these rates spindling growth was evident. At the 500 ppm concentration bermudagrass stolon growth was slightly inhibited. In Meyer zoysia additional upright growth was observed following application of gibberellic acid but no improvement was obtained in rate of turf establishment.

#### REFERENCES

1. Bass, L. N. Effect of Various Concentrations of Gibberellic Acid on the Germination of Kentucky Bluegrass and Merion Kentucky Bluegrass Seed. Mimeo. Leaflet, Iowa State College, Ames, Iowa. 1958.
2. Leben, C. Effects of Gibberellic Acid on Growth of Kentucky Bluegrass. Science, Vol. 125. 1957.
3. Marth, P. C., Audia, W. V. and Mitchell, J. W. Gibberellic Acid—A Plant Regulator. H.C.R.B.—6, Mimeo. Leaflet. Revised 1957.
4. Wittwer, S. H. and Bukovac, M. J. Gibberellin and Higher Plants: V. Promotion of Growth in Grass at Low Temperatures. Quarterly Bulletin of the Mich. State Agric. Expt. Sta., Mich. State Univ., East Lansing, Mich., Vol. 39: No. 4: 682-686. 1957.
5. Youngner, V. B. Gibberellic Acid on Zoysiagrasses. Southern California Turfgrass Culture, Vol. 8: No. 1. 1958.



## A New Turfgrass Insect Pest?

BY JOHN C. SCHREAD AND ALEXANDER M. RADKO

Entomologist, Connecticut Agricultural Experiment Station, New Haven; and Director, Eastern Region, United States Golf Association Green Section, respectively.

**D**uring droughty seasons, insect activity normally is greater on turf areas than during wet seasons. The 1957 season in the Northeastern States was one of record breaking droughts; New York City reported it to be the driest in 131 years, and so it follows that general insect activity was unusually high on turf in these areas of the Northeast.

Sod webworm and cutworm infestations were particularly heavy last season, while beetle grubs and chinch bugs occurred only at random in localized areas. There was, however, one insect that was exceedingly more prominent in '57 than during previous years, and to some degree was evident on almost every golf course visited by members of the Northeastern Green Section staff. This was the "frit fly," *Oscinella frit* (L.). It is also called the "grain fly."

To what extent this insect has been causing injury, we at this time have no precise information, but it has been found in great numbers in dense turf areas, and most abundant on Merion bluegrass turf and bentgrass putting greens. Golfers have complained about them as they have been disturbing on putting surfaces where they seem to be attracted to the golf ball. Superintendents have noted them and have asked for identification of this fly which acts somewhat like the leafhopper. The purpose of this article is to identify this insect pest and to provide something of its known background in agriculture.

Frit flies are considered to be common insects and one or more species may be collected rather easily by sweeping with an insect net. Certain head and wing characteristics readily establish individ-

uals as belonging in the Dipterus family Chloropidae. To the naked eye, the adult looks like a miniature housefly.

The common name of this insect pest is derived from its activity on grain crops. The larvae destroy immature kernels of grain, in many heads they eat out almost every kernel; such light and worthless kernels the Swedes called "frits," hence the common name of this fly.

The extremely active adults of the more than 25 known species are for the most part bare, without many hairs or pubescence, black to slightly pale in color, with short to very short wings. The adult fly generally ranges from 1.1 to 2 mm. in length.

The "frit fly" which occurred so commonly on Merion bluegrass and on bentgrass putting green surfaces during the summer of 1957 was identified by the United States National Museum in Washington. Owing to the difficulties sometimes experienced in separating specifically one species from another, it is well to have specimens reviewed by Museum experts rather than rely on a superficial examination or snap judgment in naming them.

Some of the species of "frit flies" display a rather wide variation in habits. A number of them are common in meadows and other grassland areas where the ground cover is allowed to grow rank and uncared for. Others infest the stems of wheat, oats, rye, clover, in addition to lawn and golf course grasses. Some live in the wounds of lesions made in plants by insects while others spend their feeding period in excrement. There seems to be at least one or two species which are troublesome to man and animal. One is known as the "eye gnat." It is reported as tormenting to man and domestic animals in certain areas of southern California, and may be partly responsible for the transmittal of pink-eye disease of humans. Another species spreads Naga sore and conjunctivitis or sore eye in India.

Oscinella frit, the species which could, under favorable conditions, develop into a serious golf green pest is widely distributed throughout the United States, and appears to be essentially destructive to grasses belonging to the family Gramineae. "In 1889 H. Garman of Kentucky reported first occurrence of the 'frit fly' in the United States. About the same

time J. Fletcher reported its presence in Canada. In 1913 Criddle detected three summer broods. The first brood occurred from June 12 through July 13 (heaviest between June 25-30); the second July 16 through July 26; and the third from August 10 through August 28." (1)

The larvae or maggot stage of this species is short, thick, and cylindrical in appearance. The mouth parts which consist of stout hooks are designed principally for tearing and rasping plant tissue. The maggots of the late fall brood overwinter in the mined stems of grass and grain. "Injury caused by the frit fly can be easily mistaken for that caused by the Hessian fly due to the similarity of attack. Larvae of the frit fly are distinguished from the larva of the Hessian fly from the fact that the former are located in the center of the stem and crawl actively when removed, while the Hessian fly larva is between the bases of the leaves and is extremely inactive. The frit larva often causes the central leaf to turn brown and die while leaves about it remain green. In cool moist weather, the insect may be abundant and yet only a few plants will show this symptom. Since the larva does not usually cut the central leaf entirely off in periods of low transpiration, the leaf will remain green for some time, whereas the same injury in hotter and drier weather would kill the leaf at once." (1)

"Adults of the frit fly are rare on grain after it has begun to shoot-up to head, or on grasses approaching maturity; however, they are abundant on wheat and grass that is in the early stage, stooling, or producing new shoots. Bluegrass lawns that are sprinkled and mowed yielded frit flies practically all season." (1) The attraction of the frit fly for new shoots unquestionably explains its heavy infestation in two of our most prolific producers of new shoots in turf grasses—Merion bluegrass and creeping bentgrass.

Control of "frit flies" may be obtained by spraying infested turf and sod land with DDT. The insecticide can be used in a wettable powder or emulsion form. Dusting with a 10 per cent DDT formulation may be expected to produce good results in control. Treatments for the most part will kill adult flies and exposed maggots. The latter stage, however, in addition to the flies should be effec-

tively controlled when individuals come in direct contact with DDT treated vegetation over a period of several or more weeks subsequent to treatment.

REFERENCE CITED  
(1) Aldrich, J. M., U.S.D.A.; European Frit Fly in North America, Journal Of Agricultural Research, Vol. 18, 1920.

## Superintendents Award \$1,900 from Scholarship and Research Fund

A total of \$1,900 in scholarships and research grants will be placed this year by the Golf Course Superintendents Association Scholarship and Research Fund. Directors of this organization awarded a \$400 Scholarship to Purdue University, two \$100 Scholarships to Pennsylvania State University, and four separate research grants.

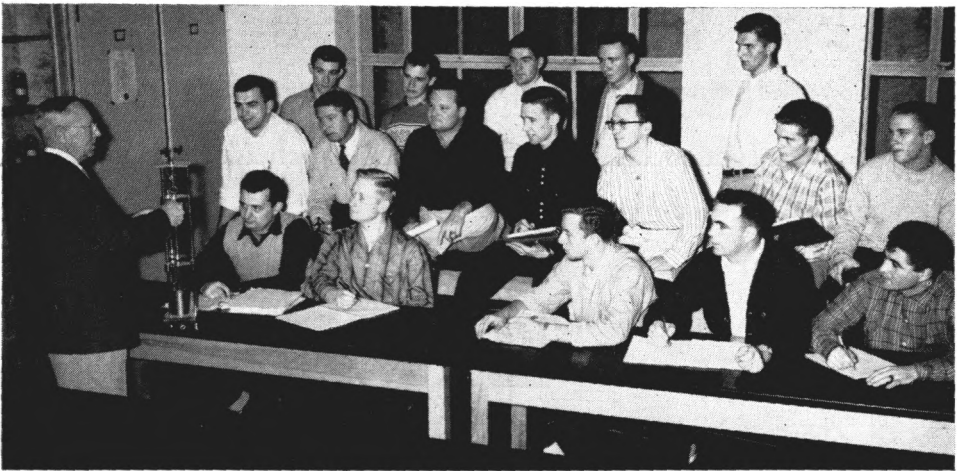
Continuing with a program started in 1951 at University of California at Los Angeles, the school will have the second Research Grant of \$250 for work on Kikuyugrass control. The Georgia Coastal Plain Experiment Station at Tifton, Ga., will receive a \$250 research grant, Kansas State College at Manhattan, Kans., will also receive a \$250 research grant.

These latter are placed in the field of general turf research. In a more specialized field, a \$500 Grant will be made to the University of Wisconsin, Madison, Wis., for the field of Nematode research.

This year will mark the third year of operation of the GCSA Scholarship and Research Fund and emphasizes the interest and need for training in the field of turfgrass management and additional specialized turf research. It is expected that additional funds will be placed this coming fall. The Fund was organized through the efforts of the Golf Course Superintendents Association and shares offices with the GCSA in St. Charles, Ill., but operates entirely separately from that organization.



Kent Potts, left, Agronomy student at Texas A. and M. College, receives a \$200 Trans-Mississippi Golf Association Scholarship from Dr. Marvin H. Ferguson, Mid-Continent Director and National Research Coordinator of the USGA Green Section. Potts and another student, Carlton Gipson, are studying the effects of different types of golf shoes—spike, lug-sole and ripple-sole, on turf used for golf greens. The awards were presented at a recent meeting of the Student Chapter of the American Society of Agronomy at the college.



Students from twelve states and Canada observe Professor Musser demonstrate equipment which measures the degree of soil compaction as a part of their four eight-week terms of on-campus instruction in the Turfgrass Management Winter Course.

## Turfgrass Course at Penn State

**T**he new Turfgrass Management Winter Course of The Pennsylvania State University has been attracting nationwide attention among leaders of the turfgrass industry. The increased recognition of the importance of turfgrass and the large number of problems in this field have indicated the need for training in turfgrass management.

Graduates of the course will be prepared for positions as turf supervisors on airports, athletic fields and school grounds; maintenance directors of highway roadsides and medial strips; supervisors of cemeteries, parks, estates, and golf courses.

The course at Penn State consists of two eight-week terms of instruction in each of two years. During this period intensive classroom and laboratory training is provided in the identification, establishment, and maintenance of the grasses used in the various climatic areas of the United States and Canada.

Supplementary instruction is provided with courses on soils and fertilizers; identification, production, and maintenance of trees, shrubs, and other horticultural material; installation and use of irrigation and drainage equipment; principles of tractor and machinery operation and

care; keeping of records; and elements of landscape design and lay-out.

Students have the opportunity of selecting an elective course each term. These may be in the ornamental nursery field or in farm equipment maintenance.

The regular instructional staff and facilities of the University are utilized in this program.

Classes begin the first week of November and end the latter part of March.

A full season of on-the-job training is recommended for the summer period between the second and third terms. Individuals now employed in turfgrass work may return to their positions for this period.

High School graduates 16 years of age or older are eligible for enrollment. The high school graduation requirement is waived for those who demonstrate maturity, purposeful interest, and have had prior experience in turfgrass management.

Further information, including individual course descriptions are available from the Director of Short Courses, College of Agriculture, The Pennsylvania State University, University Park, Pennsylvania.

# IT'S YOUR HONOR

## ***Stroke and Distance Penalty***

To THE USGA:

I have read Mr. Ficklin's letter in the April issue of your Journal.

Nobody likes the stroke and distance penalty for a ball out of bounds; I no more than Mr. Ficklin. However, I do not believe this penalty should be changed unless the lost ball and unplayable lie penalties be changed at the same time.

A ball that is knocked out of bounds is almost invariably the result of a bad shot rather than just bad luck. A ball that is lost or found in an unplayable lie is still within the confines of the golf course and may be more the result of a bad break than a bad shot.

Suppose that Mr. Ficklin and I are playing a match together and that on a given hole I drive my ball out of bounds and Mr. Ficklin drives his to the edge of some woods on the course. Now let us further suppose that Mr. Ficklin fails to find his ball or finds it in an unplayable lie. I don't think Mr. Ficklin would relish my being able to lie two off the tee on my next shot as against three for him.

DAVID M. MINTON, JR.  
New York, N. Y.

## **Green Section Membership A Boon**

To THE USGA:

I am writing as a member of the Board of Directors of Illini Country Club.

About a year ago we joined the Green Section of the USGA, and, I must admit, primarily, because I felt we should support it even though we got very little from it. Since that

time, Jim Holmes has visited our Club several times and has been in almost constant contact with our Green Chairman and Green Committee, and I can't say enough for him as an individual and the Green Section as a part of the USGA. The ideas and suggestions received are worth thousands of dollars to our Golf Club and I feel sure that future contacts will be even more fruitful.

I congratulate the USGA, and Jim Holmes in particular, on a wonderful job.

WILLARD BUNN, JR.  
Illini Country Club, Ill.

## **South Africa Appreciative**

To THE USGA:

I have been instructed by the President and the Executive of this Union to express their very deep appreciation of the hospitality and courtesy in inviting Mr. Jackson to attend the recent conference which took place in Washington in connection with the proposed World Amateur Golf Team Championship.

Mr. Jackson, at a recent meeting of my Executive, gave a full report of the decisions taken at that conference and at the same time was loud in his praises not only of the efficiency in which the conference was conducted, but with the success and friendly spirit which emanated therefrom.

My Executive is hopeful that the Tournament will be a tremendous success next October when it is held at St. Andrews and I have also been asked to wish you the best of luck in that Tournament.

T.E.L. WALTON, SECRETARY  
South African Golf Union

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