



60 Years of Service to Golf . . .

by STEPHEN J. HORRELL, Green Section Committee Chairman

The Story of the USGA's Green Section



(Above, right) Dr. C. V. Piper.
(Right) Dr. R. A. Oakley.

GOLF IS AND HAS always been a dynamic force in the turfgrass industry. This came about because serious problems with the maintenance of golf course turf forced the United States Golf Association to assume a position of leadership in the turfgrass industry in 1920. In November of that year the Green Section was formed and from that day to this it has been the only non-partial, scientific agency working full-time in turfgrass science as it relates to growing grass for golf.

Golf as we know it today had its start prior to 1900 in America. In those early days clubs followed procedures established by the Scots which included minimal maintenance — with grazing sheep to mow the grass, but clubs in this country soon found that sheep were not a satisfactory solution and the search was on for information and help. Meanwhile, golf courses were being constructed at a rapid pace, and nobody had any training in the field of turfgrass science. There was no special equipment, fertilizers or chemicals for grass at that time. The responsibility of upkeep was assumed by club members who tried but were woefully unprepared to cope with the magnitude of the task.

In 1906, according to record, the first golfer to request assistance from the United States Department of Agriculture with putting green problems was Dr. W. S. Harban. There he met Dr. C. V. Piper and Dr. R. A. Oakley, who were receptive

and helped as they could. Each was a rarity of the times: they were scientists with a knowledge of turfgrasses. They soon realized that the existing knowledge on the subject was far from adequate to meet the needs of golf and that extensive experimental investigations were necessary. Unfortunately, no funds were available for this purpose, but in cooperation with many clubs investigations were begun.

IT WAS OBVIOUS also that a great deal more research was needed and in 1915 the Executive Committee of the United States Golf Association called on the Secretary of Agriculture, the Honorable David F. Houston, to request additional help in solving problems of greenkeeping. The committee pointed out that about \$10 million a year was being spent on the establishment and maintenance of turf by golf clubs, and it was believed that through ignorance, half the money was wasted. There were no trained greenkeepers at the time and course care was directed by members. As a result of that appeal, the turf experiments were begun at Arlington, Virginia, in the spring of 1916.

In 1920, E. J. Marshall, who was Green Committee Chairman of the Inverness Club in Toledo, Ohio, conceived the idea of forming a Green Section of the United States Golf Association to work in cooperation with the United States Department of Agriculture on turfgrass problems. As a result, the Green Section was established by the USGA Executive Committee.

Dr. Piper agreed to serve as Chairman of the Green Section while retaining his position as Head of the Agronomy Section of the United States Department of Agriculture Research Station. Dr. Oakley agreed to serve as Dr. Piper's associate and assistant. It was the beginning of an organized approach to solving turfgrass problems on golf courses here in the United States. Piper and Oakley lost no time. In January, 1921, the *Bulletin* of the Green Section was born. It fast became known as "The Bible of golf course care." Those responsible for course care at clubs throughout the nation eagerly looked forward to receiving this monthly publication. The *Bulletin* was published through December, 1933, when it was discontinued in the depths of the Depression because of the lack of funds. The *Bulletin of the Green Section of the United States Golf Association*, was published from February, 1921, until December, 1933. *Turf Culture and Timely Turf Topics* shortly replaced the *Bulletin*, and it was continued through 1947. *USGA Journal* combining *Timely Turf Topics* began publication in spring, 1948. In 1950, the name of the magazine was changed to *USGA Journal and Turf Management* and it was continued as a combined publication until the *USGA Green Section Record* became a separate publication.

FROM 1920 TO 1953 the Green Section conducted research, first at Arlington, Virginia, and then at Beltsville, Maryland, and much of the research activity made up the substance of articles in its publications. National Field Days were held to exhibit and discuss research trials, and golf clubs benefited through attendance by their greenkeeper and interested club officials. Many of today's procedures in maintenance "got off on the right foot" as a result of Green Section research. Grasses were tested for golf. Golf professionals were invited to come to Arlington and Beltsville to putt on the new bentgrasses and to play iron shots from experimental fairway grasses such as U-3 bermudagrass, Meyer zoysia, Merion bluegrass and others.

In 1932, Dr. John Monteith, the Green Section Director, published "Turf Diseases and Their Control." Dr. Monteith developed the first effective fungicides for turfgrass use; prior to his research extensive loss of turf to disease was commonplace.

In 1947, Dr. Fred V. Grau played a major role in getting turfgrass recognized by the American Society of Agronomy as a major agricultural industry.

IN 1950, AFTER YEARS of testing, the Green Section, in cooperation with the Department of Agriculture, released Merion bluegrass as an improved Kentucky bluegrass variety. The impact upon the turfgrass industry was phenomenal.

In 1950, the book *Turfgrass Management* by Prof. H. B. Musser was published, and it was well-received by the golf industry. It was sponsored by the USGA. Currently, a new USGA-sponsored book, authored by Dr. James B. Beard, is in the final stages of writing. Announcement of its publication date will be made shortly.

In 1951, Meyer zoysia was released jointly by the Green Section and the Department of Agriculture as an improved cultivar.

After 1953, the USGA Executive Committee decided to change the emphasis of the Green Section's thrust to an extension program of bringing personal agronomic assistance directly to USGA Member Clubs. However, research was not abandoned. From 1953 to the present day, some \$750,000 has been allocated to worthy projects related to golf. These funds were derived from a percentage of USGA dues and contributions from the following organizations and individuals, but we especially wish to acknowledge substantial or annual contributions from the following:

Alabama Chapter PGA, Alabama Golf Association, Augusta National Golf Club, Birmingham Golf Association's Foundation, Carolinas Golf Association, Georgia Golf Course Superintendents Association, Michigan and Border Cities Golf Course Superintendents Association, New England Golf Association, PGA's National Golf Fund, Southern Golf Association.

THE FOLLOWING ARE some of the significant accomplishments achieved by the Green Section's research funding program since 1953:

(1) Specifications for putting green construction were developed and published. After 15 years of research, Dr.

The killing action of 2,4-D on dandelion.





Merion bluegrass — the first improved Kentucky bluegrass cultivar, released jointly by the USGA and USDA.

Marvin H. Ferguson, a former Green Section Director, saw the project to successful conclusion. Thousands of these greens are now in existence.

(2) Supported a project in breeding with Rutgers University. Dr. C. Reed Funk tested and released many new varieties of Kentucky bluegrass including Adelphi, Bonnie-blue, Brunswick, Touchdown, and RAM I. Dr. Funk is the first scientist to successfully hybridize Kentucky bluegrasses.

(3) Supported the work that culminated in publication of the *Poa annua* bulletin by Dr. James B. Beard. Copies were mailed to all USGA Member Clubs.

(4) The Green Section defined a specification for bunker sand.

(5) The Green Section defined its position on topdressing mixtures for putting green surfaces.

(6) The Green Section conducted traffic studies which resulted in modification of the golf spike and golf shoe.

(7) We are presently supporting a study conducted by Dr. Beard, at Texas A&M University, on wear resistance of turfgrasses.

(8) We supported projects at the University of Georgia that resulted in improved machinery for the industry, a topdressing mixer, an improved thatcher and a machine that will clean gravel and other debris from bunker sand.

(9) We encouraged support of a new technique that may revolutionize spraying chemicals on grasses. It is a process whereby the spray is electrically charged, thus insuring a far greater efficiency of all chemicals sprayed. This new technique is expected to have a positive effect on the environment and on golf course budgets.

(10) The USGA made available to all golf clubs a device known as the Stimpmeter. The original model was produced by Edward S. Stimpson and was modified by Frank Thomas. The Stimpmeter gives clubs the opportunity to measure the speed of their greens and to select a speed the membership is comfortable with.

(11) The Green Section's research support has not only assisted the industry, but it also has trained leaders in the turfgrass field. Many who received USGA support are now active in research, teaching or extension at leading universities and industry throughout the nation. Individual names are listed on Page 13.

From 1953 through the present day, major Green Section emphasis has been placed upon bringing all its research and extension expertise and experience to benefit USGA Member Clubs. There are 11 agronomists presently employed by the USGA. From 1920 through the present, Green Section agronomists travelled in excess of five million miles making more than 33,000 visits to golf courses throughout the nation and the world and to attend important turfgrass events.

In total, the Green Section's national program continues to encompass all phases of golf turfgrass management. The Green Section's sole mission is and always has been to disseminate the best possible information in pursuit of better turf for better golf.

The most modern fairway mower . . . in grandfather's day.

