USGA President Frank D. Tatum, Jr. (left) and Green Committee Chairman William C. Campbell congratulating Dr. C. Reed Funk (center) upon receipt of the Green Section Award.

1980 GREEN SECTION EDUCATION CONFERENCE

Dr. C. Reed Funk 20th Recipient of USGA Green Section Award

DR. C. REED FUNK, research professor of turfgrass agronomy at Rutgers University, in New Brunswick, New Jersey, became the 20th recipient of the annual USGA Green Section Award for distinguished service to golf through work with turfgrass. The Award was presented to Dr. Funk by Frank D. Tatum, Jr., of San Francisco, California, President of the USGA, and William C. Campbell, of Huntington, West Virginia, Chairman of the USGA Green Section Committee. The ceremony took place during the 24th Annual Green Section Conference on Golf Course Management, which was held in Chicago on January 25.

In introducing Dr. Funk, Mr. Campbell stated:

"In 1961, the USGA established the Green Section Award to honor those persons who deserve special recognition for distinguished service to golf through work with turfgrass. The USGA believes there are many men and women who have made measurable contributions respecting the arena upon which the game of golf is played. Their contributions and service may be evidenced by their achievements over a number of years or by a single act. In continuing to present the Green Section Award, the USGA wishes to identify, celebrate, and hold up for emulation

President Charles H. Tadge (second from left) presenting GCSAA Citation for excellence in championship course preparation to: Wilbert C. Water, of Inverness Club, Toledo, Ohio, site of the 1979 Open Championship; William L. Burdick, of Canterbury Golf Club, Cleveland, Ohio, site of the 1979 U.S. Amateur Championship; Frank Nichols, of Brooklawn Country Club, Fairfield, Connecticut, site of the 1979 U.S. Women's Open Championship.

individuals who exemplify outstanding dedication to the game of golf through their work with turfgrass."

Dr. Funk is best known as the project leader of one of the world's most extensive turfgrass breeding programs. It began in 1962 and it is still going on. Through his research at Rutgers, he developed the first successful method of producing Kentucky bluegrass cultivars by intraspecific hybridization of apomictic parents. He released the Adelphi, Bonnieblue, and Majestic bluegrass cultivars developed through this new technique.

He also developed and released the first turf-type cultivar of perennial ryegrass, known as Manhattan, which is widely recognized and used throughout the world. Manhattan and other germplasm sources developed at Rutgers contributed to the cultivars Citation, Yorktown, Yorktown II, Diplomat, Derby, Regal, Omega, Fiesta, Dasher, Blazer, Pennant and Premier, all currently used in many breeding programs in North America and Europe.

He has accumulated one of the most valuable collections of *Poa* and *Festuca* germplasm now available in North America. He developed techniques for screening this collection for turf performance, for response to important management practices, and for resistance to many important disease problems. The cultivars Touchdown, Brunswick, Plush and Glade originated from this *Poa* collection. An attractive turf-type tall fescue is being developed from the collection of *Festuca arundinacea.* Also, the first turf-type cultivar of *Poa trivialis L.* developed in North America was developed by Dr. Funk. It is called Sabre.

Dr. Funk is a member of the American Society of Agronomy, the Crop Science Society of America, the American Genetic Association, the American Sod Producers Association, the New Jersey Turfgrass Association, the Pennsylvania Turfgrass Council, the Golf Course Superintendents Association of America, and the Golf Course Superintendents Association of New Jersey.

Dr. Funk also served on the subcommittee for Glossary of Crop Science Terms of the Crop Science Society of America; the Foundation Seed Committee, Patent and Copyright Policy Task Force, and Turfgrass Committee of the New Jersey Agricultural Experiment Station. He was the chairman of the regional committee for Breeding and Evaluation of Kentucky Bluegrass for Turf. He is a member of the Genetics and Breeding Subcommittee and National Research Program Steering Committee. Dr. Funk is the author or co-author of 168 scientific, technical and popular publications.

IN ACCEPTING THE AWARD, Dr. Funk stated:

"It is indeed a great honor to be chosen to receive the USGA Green Section Award. I gratefully accept this award on behalf of all who are contributing to the field of turfgrass breeding. The accomplishments that I am associated with have been the result of team efforts involving students, technicians, fellow turf specialists, golf course superintendents, seedsmen and growers. It has been a challenging, sometimes frustrating, but an exciting and rewarding experience for all.

"It takes many years and the cooperation of many people to develop a successful turfgrass variety. Merion Kentucky bluegrass was discovered by Joseph Valentine on the Merion Golf Club in Ardmore, Pennsylvania, in 1936. It was increased and evaluated initially by research workers at the United States Department of Agriculture, the USGA Green Section, and the Pennsylvania Agricultural Experiment Station, and also by progressive seed growers in the Pacific Northwest. Finally, beginning in the early 1950s, seed became available to the American consumer. Since then, over 70 million pounds of Merion seed has been used in North America. This variety revolutionized the sod industry and has had a tremendous impact on all other aspects of the turfgrass industry.

"The parental germplasm of Manhattan perennial ryegrass was discovered growing in Central Park, in New York City, in 1961. Since 1968, over 25 million pounds of Manhattan seed has been used in this country and abroad. The initial success of Manhattan stimulated turfgrass breeders throughout the world to initiate or expand their efforts to improve perennial ryegrass for turf. Currently, 20 million pounds of turf-type ryegrass seed are produced annually for the American market. Millions of additional pounds are used in Europe. Manhattan germplasm has contributed to the development of many newer varieties including Derby, Omega, Diplomat, Yorktown II, Fiesta, Dasher, Blazer and Belle.

Adelphi Kentucky bluegrass was the first bluegrass variety produced by controlled hybridization. Its mother was discovered by Tom Topp and Al Radko on a fairway of the Bellevue Country Club in Syracuse, New York. Dr. Felix Juska found its father growing

in his turf trials in Beltsville, Maryland. The cross that produced Adelphi was made during the late winter of 1964. The first turf plot was seeded in 1965. Adelphi was subsequently evaluated at many universities and research institutions throughout the world. Next it was necessary to evaluate seed production potential in the Northwest. The efforts and support of Bob Russell and Arden Jacklin made this possible and Adelphi became a commercial variety.

"Most new varieties will take at least 10 years of development and testing before seed becomes available for commercial use.

"Selection, hybridization and mutation breeding create the genetic variation for plant breeding programs. The plant breeder must then identify and isolate the superior plants from variable populations of tens of thousands of individuals. Spaced-plant nurseries, clonal plots and disease screening procedures are used. Next, it is important to evaluate the best selections in small turf plots subject to varying types of stress. The best entries are subsequently chosen for replicated performance trials at different locations and under different management variables. Tolerance to chemicals and other environmental stress factors should be assessed. Finally, there is no real substitute for ultimate user evaluation. The user must be pleased if this new variety is to succeed.

"The USGA Green Section has made a tremendous contribution to turfgrass varietal improvement. Prior to World War II, the USGA Green Section initiated or assisted in the programs that led to Merion Kentucky bluegrass, Meyer zoysiagrass, and a number of outstanding bentgrass varieties. In recent years, the USGA Green Section Research and Education Fund has provided generous financial support for turfgrass breeding and other research programs at Rutgers and other State Universities. Green Section agronomists have provided advice, encouragement and invaluable germplasm collections. For this support we are all most grateful. It should also be noted that turfgrass varieties developed with Green Section assistance have contributed not only to better golf, but also to millions of home lawns, recreation areas and soil conservation.

"There is a great future for turfgrass breeding. The future can bring us new varieties vastly superior to those presently available. It will take time, money, dedication and skill. A team of capable young plant breeders working with management specialists, pathologists, nematologists, entomologists, etc. and willing to devote a lifetime to such efforts will develop such varieties. Both the turfgrass professional and the average home owner will have the satisfaction of being able to do a better job as these superior varieties become available to them."

Remarks by USGA President Frank D. Tatum, Jr.

ON BEHALF OF the USGA I want to express our appreciation for a couple of rather basic things. We in the USGA deal with the fundamental, basic policy questions that are involved in the extraordinarily complex problems of administering golf in an increasingly complex world. Everything that we are doing, or at least trying to do, would, however, be absolutely meaningless, in the final analysis, because nothing matters unless the golf course is properly and effectively maintained — not the skill of the player, not the skill of the architect, not the architecture of the clubhouse, not the quality of the membership — not anything.

We are very sensitive to the fact that what you who are involved in turfgrass do involves an extraordinarily complex art and science. I've been close enough to it to be satisfied that in a real sense more art than science is involved. It is with a sense of real appreciation, therefore, that I look at a perfectly maintained golf course and realize how much caring has gone into the production of this magnificent result.

I can't pass up the opportunity to enlist you in what I'd like to think of as a development crusade, to somehow mobilize ourselves to control the amount of water that's going onto the golf courses in this country. It seems to me that it's a pervasive problem which very, very seriously affects the playing of the game.

I want you to know that we understand the difficulty because of the problems of communications with Green Committee Chairmen and members, but I also want you to know that we feel very, very strongly that this is a problem that afflicts the game more seriously than any other. We would just like to enlist your support in trying to beat it.

Now the other crusade.

WE REALLY CAN'T sit back and see the game consumed by golf carts. These abominations are among the more serious problems you have to cope with. It isn't right that all of us simply give up. Somehow we must be able to persuade people in America that playing a game in one of those abominal things simply cannot be called playing golf.

Finally, I would just like to congratulate Dr. C. Reed Funk, the recipient of the Green Section Award, both personally and on behalf of the Executive Committee. His accomplishments say a very great deal about him, and it says a very great deal about this organization that it means so much to have an Award like this presented to somebody who obviously so richly deserves it.