## UNIVERSITY OF MARYLAND PROFESSOR ELECTED FELLOW OF THE CROPSCIENCE SOCIETY OF AMERICA AND RECEIVED THE FRED V. GRAU TURFGRASS SCIENCE AWARD

Peter H. Dernoeden received the "Fred V. Grau Turfgrass Science Award" and was elected "Fellow of the Crop Science Society (CSSA)" during the annual meetings of the American Society of Agronomy, Crop Science Society of America, and the Soil Science Society of America (i.e., the tri-societies) in November 2007. The Fred V. Grau Award is given by the Turfgrass Division (C-5) of the CSSA in recognition of significant career contributions in turfgrass science. "Fellow" is the highest recognition bestowed by each of the tri-societies, and is awarded based on professional achievements and meritorious service. Only 0.3 percent of active CSSA members may be elected to Fellow annually, which was 10 members in 2007.

Peter H. Dernoeden is a Professor of Turfgrass Science in the Department of Plant Science and Landscape Architecture and joined the University of Maryland in 1980. He earned his B.S. and M.S. degrees at Colorado State University and his Ph.D. degree from the University of Rhode Island. Dr. Dernoeden's appointment includes research and extension components and he teaches a course in pest management strategies for turfgrasses. His research and extension programs involve turfgrass pathology, weed science and the management of turfgrasses for low maintenance sites. Dr. Dernoeden discovered Ophiosphaerella agrostis, the incitant of dead spot disease, and documented previously unreported diseases in the mid-Atlantic region including take-all, spring dead spot, bacterial wilt and Pythium -induced root dysfunction. He studied and reported on ways to reduce fungicide usage based on soil fertility, irrigation management and soil microbial interactions with turfgrass pathogens. Dr. Dernoeden's weed science program focused on the selective control of perennial grass weeds, crabgrass and annual bluegrass. With graduate students, a degree model to predict crabgrass emergence was developed and the emergence patterns of annual bluegrass were elucidated. He published papers on managing tall fescue, fine leaf fescues and zoysiagrass for use on lawns and low maintenance sites.

As part of his extension program, Dr. Dernoeden initiated a turfgrass disease diagnostic laboratory as a service, but the lab also is an invaluable teaching tool since he and his graduate students conduct all of the diagnoses. He coordinated every UM turfgrass field day since 1982 and organized numerous symposia, conferences, and workshops. He authored over 250 extension fact sheets and non-technical articles and has been an invited speaker at numerous state, regional and national turfgrass conferences. He is internationally recognized and has been invited to speak at seminars and conferences in Austria, Canada, England, Italy, the Netherlands, Poland, Portugal, Scotland, Slovenia and Spain.

Dr. Dernoeden is the author or coauthor of 92 refereed scientific journal articles. He is author of "Creeping Bentgrass Management: Summer Stresses, Weeds and Selected Maladies", and is co-author of "Compendium of Turfgrass Diseases" and

"Managing Turfgrass Pests." He is a Fellow of the American Society of Agronomy and is a recipient of the Northeastern Weed Science Society Outstanding Researcher Award. He served in the U.S. Army between 1970 and 1973.

The "Turfgrass Science Award' was created in 1987 by the CSSA in honor of Dr. Fred V. Grau. Dr. Donald V. Waddington from Penn State University was Chair of C-5 at the time the award was proposed, developed, presented and eventually accepted by CSSA. A major criterion for the award stipulated that candidates be evaluated on their most recent 15 years of activity to ensure a person with a sustained record of achievement would be awarded. An honorarium is given and funds for the award were donated by state turfgrass councils, associations and similar organizations. The "Fred V. Grau Turfgrass Science Award" has special significance to Maryland. During the early 1980's, Dr. Grau attended meetings of the Maryland Turfgrass Council and one day invited Dr's Dernoeden and Turner to his home in College Park for lunch. It was during this and a few other visits that the two Maryland professors got to know a pioneer in turfgrass science and the turfgrass industry.

Dr. Grau was born and raised on a farm in Nebraska and graduated from the Nebraska State College (now the University of Nebraska) in 1931. Dr. Keim, a professor at UN who taught turfgrass culture and inspired a number students to enter the field, received a \$300.00 grant from the USGA to evaluate the effects of various fertilizers on turf. Fred Grau was hired to care for the plots and maintain the records. This experience, as well as a greenkeeping job he had to earn money to pay for college, were the stepping stones to his turfgrass career. After graduation from UN, he was hired by Dr. John Monteith Jr., Director of the USGA Green Section, to care of the turf research plots at the Arlington Turf Gardens, now the site of the Pentagon. During that time the USGA Green Section had a research relationship with the United States Department of Agriculture (USDA). The USGA and USDA agreed to formally collaborate in 1920. The purpose was to conduct scientific research to improve turf for golf courses. The relationship ended around 1956.

For reasons that are not recorded, but obviously related to a desire to further his career, Grau enrolled at the University of Maryland to pursue an advanced degree. His M.S. (1933) research was on the subject of "Weed Control In Turf." He laid out his research plots in Kentucky bluegrass at the Arlington Turf Garden, where he remained an employee of the Green Section. He found that lead arsenate was effective in controlling crabgrass and grubs and later noted that the plots were still crabgrass and grub-free when the bulldozers arrived to build the Pentagon in 1942 (GCM, January 1985). Due to the immense financial hardship of the depression, the Green Section eliminated many jobs including his. The Agronomy Department Head and a soil scientist at UM "rescued him" by finding funds for him to conduct a survey of Maryland pastures. He received his Ph.D. in 1935 and was hired in the same year to be the first Extension Turfgrass Specialist at the Pennsylvania State College (now Penn State University). The position was evenly split between turf and forages. As an Extension Agronomist, he traveled throughout Pennsylvania. It was on one of these Extension trips in Berks County in 1935 that he discovered what was to become known as 'Penngift'

(Continued from previous page) crownvetch. In 1953, Penngift was formally released by Dr. Grau and Professor Musser at Penn State and in 1987 it was named the "Beautification and Conservation Plant" by the State of Pennsylvania. Today, Penngift can be found growing along thousands of miles of Pennsylvania and Maryland highways stabilizing soil, while providing the beauty of it purple summer flowers. During World War II, Dr. Grau entered the Air Force, where he helped establish grass airfields under the guidance of Professor Musser, who also was working with the Air Force at this time. In 1945, he was hired to be Director of the USGA Green Section in Beltsville MD and moved to College Park.

During Dr. Grau's tenure as Director of the Green Section (1945 to 1951), the American Society of Agronomy recognized turf as a legitimate agricultural entity and established the C-5 Division after an aggressive letter writing campaign that he initiated (ASA's Crop Section became CSSA in 1955). Dr. Grau served as the first C-5 Chair and chaired a separate ASA Turfgrass Committee from 1946 to 1955, which served as a clearinghouse for turfgrass research information. The recognition provided by a Turfgrass Division in ASA gave agricultural experiment stations (state and federally funded research units at land grant institutions) the impetus to establish turfgrass-oriented research and educational programs within agricultural universities. This led to a rapid increase in the number of turfgrass science programs at American Universities. It also was during this period when he played an important role in the release of 'Merion' Kentucky bluegrass, 'Meyer' zoysiagrass, and U-3 bermudagrass. He left the USGA in 1953 and became a consultant to golf courses and several business including West Point Products (producers of aerifiers and other turf machinery) and Hercules Powder Company (Nitroform fertilizer, including Power Blue and Blue Chip). He also operated Grasslyn, the family business for growing Penngift crownvetch. Dr Grau was a founding member of the Pennsylvania Turfgrass Council in 1955 and served as Executive Director from 1968 to 1975 and Executive Secretary from 1976 to 1981. Dr. Grau also was a founding member of the Musser International Turfgrass Foundation in 1969, where he served as President for 20 years. Among Among his many awards were the USGA Green Section Award (1969) and the GCSAA Distinguished Service Award (1954 and 1975). He died in 1990 at the age of 88 in Maryland. His legacy was summarized by Mr. Tom Mascaro (GCM, January 1991), who stated "He has left us in body but not spirit. He will continue to be with us in our lives, and in the lives of future generations. He was a man of vision - and a man of our future."

## REFERENCES AND ACKNOWLEDGEMENTS

Prepared by Peter Dernoeden with assistance from Mr. Jim Snow, Director of the USGA Green Section and Dr. Don Waddington, Professor Emeritus, Penn State University. Most of the information in this story was obtained from articles and letters written by Dr. Grau and published in Golf Course Superintendent (September/October 1976); Golf Course Management (January 1985); and from "...And A Remembrance" written by Mr. Tom Mascaro (Golf Course Management, January 1991).



The Mid-Atlantic Association of Golf Course Superintendent's annual education seminar will be held March 20, 2008, at the University of Maryland. Details will be mailed out in February.