

The Fred V. Grau Turfgrass Science Award
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The “Turfgrass Science Award’ was first awarded in 1987 by the C-5 Division of the Crop Science Society of America (CSSA) and was named in honor of Dr. Fred V. Grau. Donald V. Waddington was Chair of C-5 at the time the award was presented and accepted by CSSA in 1986. The award was proposed by John F. Shoulders and John R. Watson (C-5 “Award and Professional Advancement Committee”) during the 1985 business meeting of the C-5 Division (Robert N. Carrow presiding). The committee recommended that the new award be named the Fred V. Grau Award and that it be established to recognize significant career accomplishments to Turfgrass Science. The proposed award was brought forward by the C-5 Chair (D.V. Waddington) to CSSA in 1986 (James B. Beard presiding CSSA President). At the time the executive committee of CSSA had a policy that awards not be named for an individual or company. Furthermore, J. Beard wanted to establish additional awards specific to those members not eligible for existing CSSA awards. Hence, J. Beard initiated contacts with the Seed Science and Turfgrass Science divisions concerning the possibility for these subject related areas to also develop awards. The CSSA Board changed the policy at the 1986 meeting so that names of individuals could be used for memorial or honorary awards. A major criterion for the Fred V. Grau Award stipulated that candidates be evaluated on their most recent 15 years of activity to ensure persons with a sustained record of achievement would be awarded. An honorarium was established and funds for the award were solicited by D. V. Waddington from state and regional turfgrass councils, associations and similar organizations.

Dr. Grau was born and raised on a farm in Jefferson, Douglas County, Nebraska and graduated from the Nebraska State College (now the University of Nebraska - Lincoln) in 1931. Dr. Franklin D. Keim, a professor at UNL who taught turfgrass culture and inspired a number students to enter the field, received a \$300.00 grant from the United States Golf Association (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 UNL, he was hired by Dr. John Monteith, Jr., Director of the USGA Green Section, to care for 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 (Maryland Agricultural College prior to 1926) to pursue an advanced degree. His Master of Science (1933) thesis was titled “The Use of Chemicals In the Control of Turf Weeds.” He initiated his research with

about 20 chemicals and evaluated them in the greenhouse and on lawns around the University of Maryland campus. Once he narrowed down the list of candidate herbicides he conducted studies at the Bannockburn Golf Course in Glen Echo, MD; East Potomac Golf Course in DC and the Arlington Turf Gardens in VA. Most of his studies were conducted on Kentucky bluegrass, the predominating species in the DC area at that time. Some studies were performed in mixed German bent, colonial bentgrass and bermudagrass. He remained an employee of the Green Section at this time and was supervised by Dr. John Monteith, Jr of the USGA and Professor Jacob Metzger at the University of Maryland. He stated in his MS thesis that the five most important weeds of putting greens included crabgrass, chickweeds, dandelion, plantains and white clover. He estimated that weed control in greens, which was performed by handpicking, to cost about \$1000 annually and this figure would include weeding areas immediately surrounding the clubhouse. He reported that “plantains, chickweeds, white clover, pennywort and knotweed have succumbed to the soluble compounds of arsenic.” “Of the chemicals used sodium chlorate has most effectively controlled crabgrass and milk purslane.” He found in his weed control experiments that live steam and dry heat from an asphalt heater were “nonselective and impracticable.” Sodium chlorate caused slight turf injury and he estimated that the material would cost about ten dollars an acre. Although no mention of grubs in his thesis, he did say at a later time that he found that lead arsenate was effective in controlling crabgrass and grubs and noted that the plots were still free of crabgrass and grubs 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. Professor Jacob Metzger, Chair of the Department of Agronomy at the University of Maryland “rescued him” by finding funds for him to conduct a survey of Maryland pastures. His dissertation was titled “Factors Affecting Pasture Quality – An Inventory of Soils, Vegetation, and Management of Maryland Permanent 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 Pennsylvania 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’ 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 its 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 1953), the American Society of Agronomy (ASA) 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 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 February 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, serving as President for 20 years. 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. 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

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