## History of the UW-Madison Turf and Grounds Management Program in the Department of Soil Science

The UW-Madison Turf and Grounds Management Program grew out of a 1959 conversation between Dr. O.J. Noer and Dr. L.E. Engelbert, then chair of the Department of Soil Science. "O.J.", as everyone knew him, completed his B.S. degree in the Department of Soil Science in 1912 and his Ph.D. in 1926 with Emil Truog. The subject of his thesis research was the fertilizing value of activated sewage sludge, "Milorganite," which the city of Milwaukee had just begun to produce. By the time of this meeting, O.J. was nearing the end of his career as an agronomist in the Milorganite Division of the Milwaukee Sewage Commission. In this position he became nationally renowned as an expert in golf turf management. He had criss-crossed the country many times by car and train, assisting golf course superintendents with their turf management problems and, with their collaboration, conducted some of the earliest research on the nutritional needs of turfgrass and established a soil testing service for the nation's golf courses. Through these travels and contacts, O.J. became convinced that the advancement of golf course management resided in superintendents being formally trained at the collegiate level. This was the message he delivered in the 1959 meeting. He was also quite adamant that such training should be done at his alma mater and in the Department of Soil Science, where, from his experience, he knew that the training would be rigorous and comprehensive. His presentation was convincing and Dr. Engelbert called into the meeting Dr. James Love, whom Dr. Engelbert felt was in the best position in the department to establish the program that O.J. was promoting.

Dr. Love accepted the challenge placed before him. After consulting with O.J. and others, he developed a curriculum in turfgrass management, drawing from existing courses and expertise in numerous departments in the College of Agricultural and Life Sciences and elsewhere on the campus. The Turf and Grounds Management Program (actually a specialization in Soil Science), became a formal program in 1961. The first two students graduated in 1964. Dr. Love continued to guide the program and advise all of the students in the program until his retirement in 1986. He effectively used Soil Science 101 (now 301) as a forum in which to advertise the program and recruited graduate students to conduct some of the earliest research in the U.S. on turfgrass management. During his 23 years guiding the turfgrass program, Dr. Love advised 105 graduates of the program. He had the distinct pleasure of watching many of them become superintendents on some very prominent golf courses within the state and around the country, and assume leadership roles in their state and national professional organizations.

With Dr. Love's pending retirement in 1986, the department sought out another faculty member to assume responsibility for the Turf and Grounds Management Program. Dr. Wayne Kussow, who had transferred full-time into the department in 1983 from a part-time position in the International Agricultural Programs office and had conducted some research on turfgrass, was the logical choice. He assumed responsibility for the program with the stipulation that henceforth all his research and outreach efforts would focus on turfgrass. One of his earliest thrusts was to establish the Badger Turf and Grounds Club and to develop a brochure that advertised the program. The brochure, reproduction of which was financed by the Wisconsin Turfgrass Association, proved instrumental in calling attention to the program and increasing enrollment. Until that time, annual enrollment ranged between 8 and 12 students. By 1995, enrollment in the program had increased to over 30 students per year. With overall undergraduate numbers progressively declining in the department over this same period, the "turfies" came to constitute

over 50% of the undergraduates in Soil Science, a situation that exists to this day. In the early 1990's, Dr. Kussow collaborated with faculty in Horticulture in development of a turf and grounds management specialization in that department. The specialization has since been dropped from the Horticulture undergraduate curriculum and once again resides only in Soil Science.

The Badger Turf and Grounds Club has played an important role in the education of students. It serves as a forum for outside speakers to enlighten them on subjects vital to them but not available within the university. The club promotes and subsidizes student attendance at state, regional and national professional conferences. Each year a team of students is prepared to participate in the Turf Bowl competition sponsored by the Golf Course Superintendents Association of America at its annual conference. In 2003, the UW team placed 11th out of 60 teams representing turf management programs throughout the U.S. Lastly, the club annually performs a public service project, such as renovating the turf areas around the capital square, sodding around apartments constructed by Habitat for Humanity, and providing the UW grounds maintenance staff with soil analyses and maintenance recommendations for turf areas across the campus.

Since assuming responsibility for the turf and grounds management specialization in 1986, Dr. Kussow has guided 111 students through the program. In recent times enrollment in the turf and grounds management specialization has stabilized at about 25 students annually. The numbers could likely be increased through a stepped-up recruitment effort, but this would come at the expense of employment opportunities. Graduates have always been in the enviable position of being able to choose from 2 or more employment options. Starting salaries are currently in the range of \$26,000 to \$32,000, well above the starting salaries for graduates from several other majors in CALS.

Starting while in school and continuing throughout their professional careers, graduates of the turf and grounds specialization form a very closely knit group. They know that they can always turn to Dr. Kussow for advice and seek help from each other with turf management problems and personal issues. Dr. Kussow provides quick assessments of the quality of soils and other materials being considered for golf course and athletic field construction, and alerts students and graduates to employment opportunities. He receives and distributes requests from golf courses across the country seeking high quality student interns. For these reasons, the turf and grounds management graduates constitute a group of alumni who are fiercely loyal to the Department, CALS, and the University. It is that loyalty that guaranteed success in the effort of the Wisconsin Turfgrass Association to raise \$250,000 for construction of the O. J. Noer Turfgrass Research and Education Facility over the period of 1989-91. In 1998 the Wisconsin Turfgrass Association decided to focus its efforts on the creation of Distinguished Fellowships for graduate students whose research was on problems of concern to the turf industry. They set as their goal, the creation of four such fellowships, which signified a commitment of raising one million dollars. The first fellowship, named in honor of Dr. Kussow, was fully funded in 2001. Loyalty and recognition of the high quality of the turf and grounds management program is also the impetus for the green industry to annually provide 9 to 10 scholarships for turf students in amounts ranging from \$500 to \$1,000.