

A Brief History of The Department of Soil Science University of Wisconsin-Madison

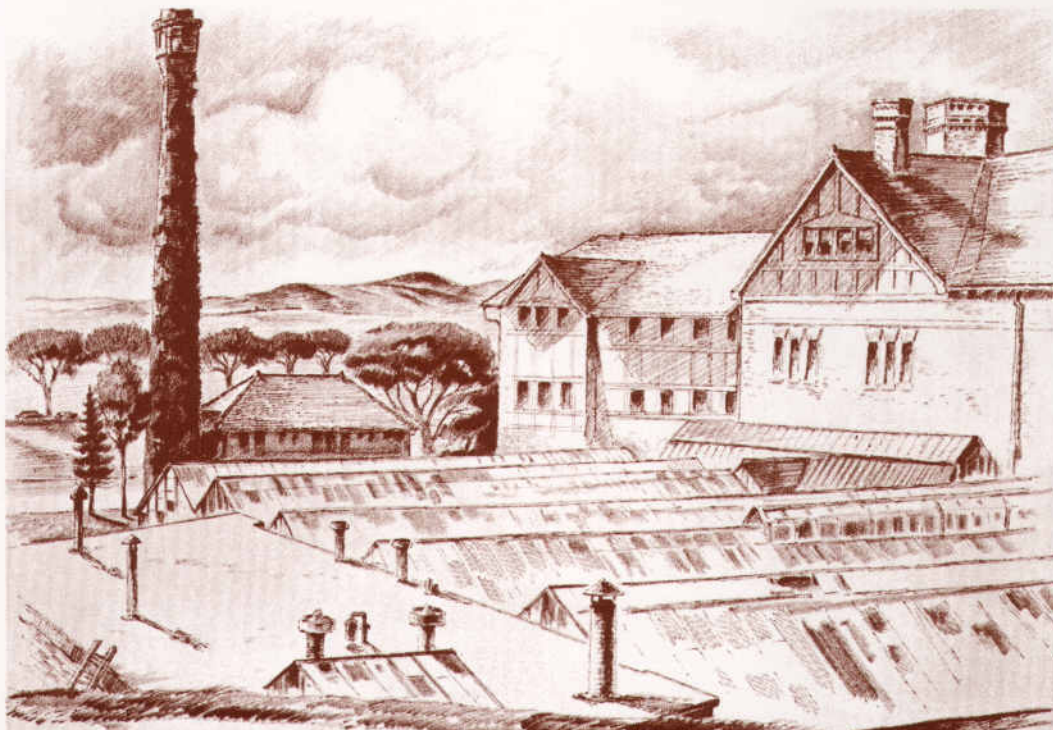
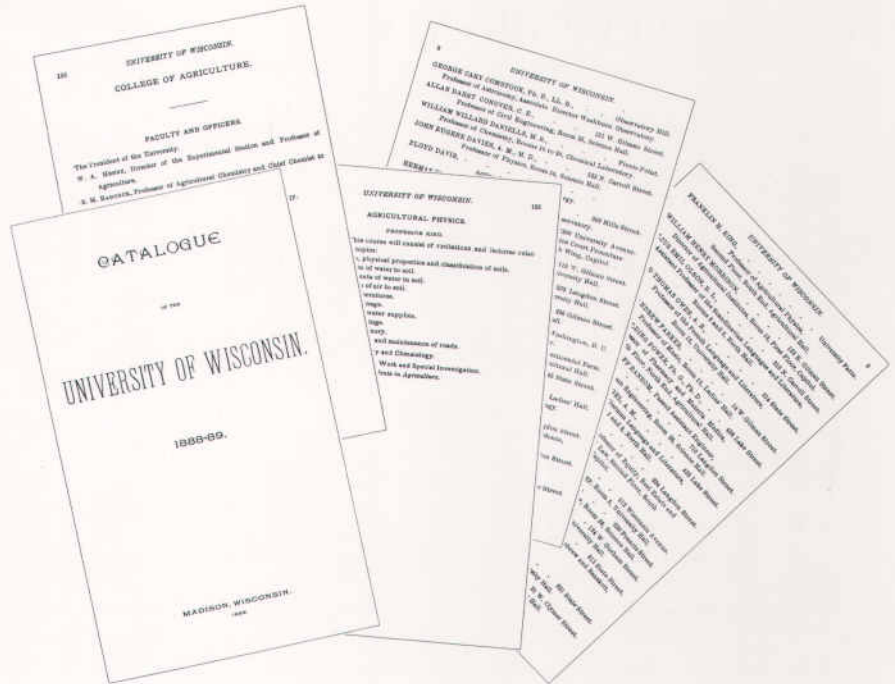
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The Department of Soil Science, as we know it today, has had a long and varied history. It had its beginning in the 1888-89 school year when W. A. Henry, the first dean in the newly established College of Agriculture, hired F. H. King to be Professor of Agricultural Physics (see U.W. Catalogue 1888-89 giving faculty and course work — notice classes taught by King that year). Courses were held in Agricultural Hall, now called South Hall, and together with Bascom and North Hall (the oldest, built in 1850) constitute the three oldest buildings on the campus today. Agriculture (South) Hall also served as a dormitory for the students, as well as housing for the faculty and their families. Studies were also conducted on the University farm, 195 acres of land purchased in 1866, much of which now surrounds Washburn Observatory and the present day Ag campus. Mr. W. W. Daniels was the first professor of Agriculture and Chemistry hired in what was then the Department of Agriculture

in Letters and Science. He established a fruit tree orchard (some trees still remain) on the north slope of Observatory Hill and pastured the farm's dairy herd on the west slope. Daniels resigned his position in agriculture when Henry was hired as Professor of Agriculture in 1880.

Increasing enrollments in the

early years created the need for improved instruction and research facilities and in 1894-96, a building to house Horticulture and Agricultural Physics was constructed. The original name of the building, etched in stone, can still be seen over the main entrance off Observatory Drive. The building has since been renamed King Hall



A sketch of the Solls Building on the UW—Madison Campus. The sketch, one in a series of sketches of the campus, was done by Professor Byron Jorns. Jorns, a professor of agricultural journalism, was also an accomplished artist and notable among his work were the murals depicting rural Wisconsin in the First Wisconsin Bank Building on the Capitol Square.



UW Campus today and yesterday.



and is the second oldest building on the Ag campus (Hiram Smith Hall finished in 1882 is the oldest).^{1/} King, a pioneer soil physicist, was called to Washington to head the Division of Soil Management, Bureau of Soils, U.S.D.A. in 1901 and A. R. Whitson, who had been appointed to the college staff in 1899, took over his duties. In 1905, when the department name was changed from Agricultural Physics to Soils, Professor Whitson became its first

chairman, and since it was the first Department of Soils in the nation, he also has the distinction of being the first educator with the title of Professor of Soils. It should be emphasized that this was more than just a name change. For example, the Department of Agricultural Engineering was created to do much of the mechanical and engineering work done in Agricultural Physics. In fact, E. R. Jones who assisted King was named its first chairman. The re-

maining role was more Soils than Ag Physics — Whitson and King

^{1/}It may be of interest to note that King Hall was constructed at a cost of \$37,000 and 90 years later when it was completely remodeled (1983-84), the cost was slightly over 2 million dollars. See photo showing Hiram Smith Hall to the right, the old heating plant (now the Bulletin Office for the college) in the foreground and King Hall to the left behind it. Notice the windmills, used by King in some of his early studies in mechanics. Another photo shows Professor King with his class, circa 1900. Notice the seats for the students along the right side.

were doing fertility work by 1900. In 1915-16 an annex to King Hall was built that was eventually to become known as the Soils Building.

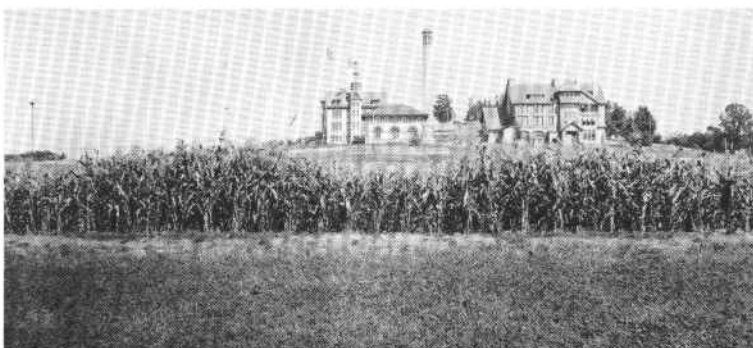
Among the first students to enroll in the newly established Department of Soils was a young farm boy from Independence, Wisconsin. Following his graduation in 1909, Emil Truog was offered the position of Research Assistant in the Soils Department by Professor Whitson. This was to mark the beginning of a 45 year career for Prof. Truog in the College of Agriculture. At his retirement in 1954, it was reported that the hundred or more Ph.D.'s earned under his supervision set a record at the University of Wisconsin.

One of the graduate students whom Truog supervised was O. J. Noer (1924-26) under a fellowship grant from the Milwaukee Sewerage Commission to study Activated Sludge: Its Production, Composition and Value as a Fertilizer.^{2/} The product, later known as Milorganite, proved so successful that O. J. spent the rest of his professional career as sales manager and chief agronomist for the Milwaukee Metropolitan Sewerage District. Upon his retirement, the O. J. Noer Research Foundation was established in 1959 by friends and associates in the turfgrass industry. In the first 25 years of its existence, the Foundation has generated \$240,000 for turfgrass research grants in colleges across the country. This is a living tribute to the memory of the man and indirectly to Prof. Truog whom O. J. credited with the original suggestion that "Milorganite might find a good market on golf courses."^{3/}

Since Whitson, there have been seven other department chairmen. They are: E. Truog (1941-54), O. J. Attoe (1954-59), L. E. Engelbert (1959-69), R. J. Muckenhirn (1969-71), G. Chesters (1971-72) who resigned to become Director of Water Resources Center, L. M. Walsh (1972-79) who was appointed Dean of the College of Agricultural and Life Sciences, D. R. Keeney (1979-84) and C. B. Tanner who assumed the Chair in 1984. It is of



F. H. King and machinery class (behind King Hall).



King Hall is to the left and rear of chimney.

interest to note that Dr. Tanner, a world-renowned soil physicist in his own right, will be chairman when the department marks the 100th Anniversary of F. H. King's appointment as the first Professor of Agricultural Physics (Soil Science) in the U.S.

The Department of Soil Science has program responsibilities in undergraduate and graduate instruction, research, extension and public service. It also has a strong commitment to international agriculture. In undergraduate teaching, the department offers four options: Business and Industry, Natural Resources, Production and Technology and Natural Sciences. Students are able to select from six specialty areas: Agribusiness and Sales, Soil Resources and Land Use Analyses, Soil and Water Conservation, Turf and Grounds Management and Crop Production.

The graduate curriculum in Soil Science is divided into the following areas: soil biochemistry and microbiology; soil chemistry and

mineralogy; soil fertility and plant nutrition; soil physics; soil genesis, classification and morphology; soil and water conservation; soil resource inventory and land use planning; and forest soils.

The Department of Soil Science has long maintained a strong research and extension program in crop production and has nationally recognized land and water resource programs in non-point pollution; land use; soil-water relationships of plants and microorganisms; disposal and utilization of rural, urban and industrial wastes (from livestock, sewage and wastewater sludges, whey and fly ash); determination of the mineral, organic and elemental composition of soils and wastes; fate and impact of agricultural chemicals (fertilizers and pesticides) in soils and surface waters; and water use as related to movement of nutrients through irrigated soils. A continuing commitment by the department to international agricultural development provides the opportunity for each staff member to contribute to the college's efforts to meet the food and fiber requirements of the world.

^{2/}Title of Part 1 of O. J.'s Ph.D. Thesis published in Jour. of the Amer. Soc. of Agron., Vol. 18, No. 11, Nov. 1926.

^{3/}From Charlie Wilson's excellent article on O. J. in Sept. 1984 issue of the Grass Roots.