

DAN WIERSMA, PIONEER AGRONOMIST

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Dan Wiersma was born on 4 November 1916 on a farm near Volga, South Dakota. He attended the local rural schools and graduated from Volga High School in 1934. He received his B.S. degree in 1942 from South Dakota State University. Dan was an outstanding athlete both in high school and college. Following graduation, he entered the Army with an ROTC commission and served as a Captain in the European Theater during World War II. Dan was awarded a Purple Heart and Silver Star. After the war, he served as an extension agent in western South Dakota for six years. He then returned to school and earned his M.S. degree from the University of Wyoming in 1952 and his Ph.D. from the University of California in 1956. In graduate school, the future Dr. Wiersma studied plant-soil-water relationships.

Dr. Wiersma (Figure 1) joined the Agronomy Department at Purdue University in 1955 and had research, extension, teaching, and administrative responsibilities. His primary research interests were in irrigation and plant-soil-water relationships. At Purdue, Dan became an effective and highly respected researcher, teacher, and extension specialist. Dan directed research on droughty soils in Indiana and carried out extensive laboratory studies on the water-holding characteristics of over 200 soil types in Indiana. He was the principal authority on irrigation at Purdue. His research supplied the basic information needed by other researchers, crop production specialists, industry agronomists, and State and Federal agencies. In addition, he served on the North Central Regional Committees on irrigation, drainage, soil moisture storage, and the use of water by agronomic crops. Dan was also a member of the Plant-Soil-Water Committee of the National Science Foundation. During parts of 1962-1963, he served with the Rockefeller Foundation's Colombian Program, where he directed irrigation and evapotranspiration research. He was much sought after as a speaker in crop production extension schools, and he also effectively taught a graduate course on plant-soil-water relations.

Dan joined the Indiana Academy of Science in 1960. He was Chair of the Soil Science Section at the Fall Meeting in 1962. Dr. Wiersma published two papers in the *Proceedings*:



Figure 1. Daniel Wiersma in a photograph taken in late 1981 or early 1982 on the occasion of his retirement.

Wiersma, D. 1960. Moisture characteristics of some representative Indiana soil types. *Proc. Indiana Acad. Sci.* 69: 300-304.

_____. 1962. Increasing crop potentials through water availability. *Proc. Indiana Acad. Sci.* 71: 347-352.

In addition, he was co-author of five more papers:

Johannsen, C.J., M.F. Baumgardner, and D. Wiersma. 1971a. Leaf moisture variation within corn leaf sections. *Proc. Indiana Acad. Sci.* 80: 453-460.

- _____, _____, and _____. 1971b. Effect of changing soil moisture on corn leaf moisture. *Proc. Indiana Acad. Sci.* 80: 461-467.
- Mannering, J.V. and D. Wiersma. 1970. The effect of rainfall energy on water infiltration into soils. *Proc. Indiana Acad. Sci.* 79: 407-412.
- Stivers, R.K., D. Wiersma, and J.G. Flores. 1961. Evaluation of three sources of nitrogen for corn. *Proc. Indiana Acad. Sci.* 70: 217-226.
- Turner, R. and D. Wiersma. 1964. Determining evapotranspiration rates and soil moisture levels with climatological data. *Proc. Indiana Acad. Sci.* 72: 244-248.

He was named a Fellow of the Academy in 1977.

Dan became the Director of the Purdue Water Resources Research Council in 1966 and held that office until his retirement 17 years later. Dan was low-key, but he had the ability to meld people of diverse backgrounds in the humanities, science, and engineering into cooperative, enthusiastic, investigative groups. Dan could always recognize fluff and pretense while maintaining a sense of calm and a level of civility and courtesy. He never patronized nor attempted to preempt knowledge from an other person's specific discipline. Dan always was alert to opportunity, occasionally locating sources of funding in areas other than his own. He also assisted other faculty members in writing grant proposals and obtaining research funds. Dan's dedication to the water resources program was typified by the modest administrative setting he physically maintained as Director. Rather than having plush quarters and high administrative costs, Dan desired to make as much money as possible available for water resources research. Dan Wiersma had scores friends who appreciate the help he gave them in furthering their careers.

Dr. Wiersma was (Vice-) Chairman of the Governor's Water Resource Study Commission (1980-1982) and, upon completion of the Commission's work, was recognized as a "Sagamore of the Wabash" on 17 June 1983. He was the true author of the Commission's well-recognized book (see Literature Cited), *The Indiana Water Resource: Availability, Uses, and Needs*. As Vice-Chairman, Dan gained the respect and admiration of all the faculty involved in the project due to the exceptionally efficient manner in which he conducted the Commission's business.

Dan was also a devoted family man. He married Esther Sydow of Volga, South Dakota, in 1943. She taught mathematics at the Klondike School in Tippecanoe County, Indiana for several years. Upon retirement, Dan and Esther returned to their birthplace, Volga, where they became heavily involved in community affairs. Dan died in Brookings, South Dakota, on 8 February 1993. Esther survives with two sons, Daniel John of Chanhassen, Minnesota, and Bruce John of Aiken, South Carolina.

LITERATURE CITED

- Governor's Water Resource Study Commission. 1980. The Indiana water resource: Availability, uses, and needs. Indiana Dep. Natur. Res., Indianapolis, Indiana, 508 pp.

