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Education:

B.S.	Agricultural Engineering	South Dakota State University	1976
M.S.	Agricultural Engineering	University of Nebraska	1981
Ph.D.	Agricultural Engineering	Iowa State University	1998

Appointments:

2002-present	Associate Professor	University of Nebraska-Concord, NE
1985-2002	Assistant Professor	University of Nebraska-Concord, NE
1983-85	Area Irrigation Specialist,	USDA-SCS; Imperial and Grand Island, NE
1981-1982	Extension Project Specialist	University of Nebraska-St. Paul, NE

Partial List of Research Journal Articles:

- Biswas, S., C. A. Shapiro, **W. L. Kranz**, T. L. Mader, D. P. Shelton, D.D. Snow, S. L. Bartell-Hunt, D. D. Tarkalson, S. J. van Donk, T. C. Zhang, S. Enslay. 2013(In press). Current knowledge on the environmental fate, potential impact and management of growth promoting steroids used in the US beef cattle industry. *J. of Soil and Water Cons.*
- Bartelt-Hunt, S.L., D.D. Snow, **W.L. Kranz**, T.L. Mader, C.A. Shapiro, S.J. van Donk, D.P. Shelton, D.D. Tarkalson, and T.C. Zhang. 2012. Effect of growth promotants on the occurrence of steroid hormones on feedlot soils and in runoff from beef cattle feeding operations. *Environmental Science and Technology*. Technol.DOI: 10.1021/es202680q.
- **Kranz, William L.**, Robert G. Evans, Freddie R. Lamm, Susan A. O'Shaughnessy, and R. Troy Peters. 2012. A review of center pivot sprinkler irrigation control and automation technologies. *Applied Engineering in Agriculture*. 28(3):389-397.
- Martin, D. L., **W. L. Kranz**, A. L. Thompson, and H. Liang. 2012. Selecting sprinkler packages for center pivots. *Trans.of the ASABE*. 55(2):513-523.
- Irmak, S., M.J. Burgert, H.S. Yang, K.G. Cassman, D.T. Walters, W.R. Rathje, J.O. Payero, P. Grassini, M.S. Kuzila, K.J. Brunkhorst, **W.L.Kranz**, D.E. Eisenhauer, C.A. Shapiro, B. VanDeWalle, J.M. Rees, G.L. Zoubek, and G.J. Teichmeier. 2012. Large scale on-farm implementation of soil moisture based irrigation strategies for increasing maize water productivity. *Transactions of the ASABE* 55(3):881-894.
- Shapiro, C.A., **W.L. Kranz**, C. S. Wortmann. 2005. Salt thresholds for liquid manure applied to corn and soybean. *Transactions of ASAE* 48(3):1005-1013.
- **Kranz, W.L.**, C.A. Shapiro, B.E. Anderson, M.C. Brumm, M. Mamo. 2005. Effect of swine lagoon water application rate and alfalfa harvest frequency on dry matter production and N harvest. *Applied Engineering in Agriculture*.
- Shapiro, C.A., D.L. Holshouser, **W.L. Kranz**, D.P. Shelton, J.F. Witkowski, K.J. Jarvi, G.W. Echtenkamp, L.A. Lunz, R.D. Frerichs, R.L. Brentlinger, M.A. Lubberstedt, M. McVey McCluskey and W.W Stroup. (2001). Tillage and management alternatives for returning conservation reserve program land to crops. *Agronomy Journal* 4:850-862.

- Kranz, W.L., and D.E. Eisenhauer. 1990. Sprinkler irrigation runoff and erosion control using interrow tillage techniques. *Applied Engineering in Agriculture* 6(6):739-744.

Other publications:

- **Kranz, William**, Ray Glaser, Gene Ross, and Danny Rogers. 2012. Center pivot nozzle replacement and maintenance. Proceedings of the 24th Annual Central Plains Irrigation Conference. Colby, KS. February 21-22. p. 102-110.
- **Kranz, William**, and James Specht. 2012. Irrigating Soybean. G98-1367-A. UNL Cooperative Extension Division.
- Skipton, Sharon O., **William L. Kranz**, Jan R. Hyngstrom, and Wayne Woldt. 2012. Private Drinking Water Wells: Water Sources. NebGuide 2150. UNL Extension Division.
- Irmak, S., L.O. Odhiambo, **W.L. Kranz**, and D.E. Eisenhauer. 2011. Irrigation efficiency and uniformity and crop water use efficiency. EC 732. UNL Extension Division.
- **Kranz, W.L.**, R.K. Koelsch, C.A. Shapiro. 2010. Application of liquid animal manures using center pivot irrigation systems. *Memorias del X Congreso Nacional de Produccion Porcina*, Mendoza, Argentina p.191-203.
- **Kranz, William**. 2010. Updating the Nebraska Pumping Plant Performance Criteria. Proceedings of the 22nd Annual Central Plains Irrigation Conference and Exposition. Kearney, NE. February 23-24. pp 51-57.
- **Kranz, William L.**, Suat Irmak, Simon van Donk, C. Dean Yonts, and Derrel L. Martin,. 2008. Irrigation Management for Corn. NebGuide G1850. UNL Extension Division.
- **Kranz, William L.**, Derrel L. Martin, Suat Irmak, Simon van Donk, and C. Dean Yonts. 2008. Minimum center pivot design capacities in Nebraska. NebGuide G1851. UNL Extension Division.
- Irmak, S., Jose O. Payero, Dean E. Eisenhauer, **William L. Kranz**, Derrel L. Martin, Gary L. Zoubek, Jennifer M. Rees, Andrew P. Christiansen, Dan Leininger. 2006. Watermark granular matrix sensor to measure soil matric potential for irrigation management. EC783 UNL Extension Division.
- Yonts, C.D., F. Lamm, **B. Kranz**, J. Payero, D.Martin. 2004. Impact of nozzle spacing on sprinkler performance and crop yield. *International Water and Irrigation*. 23(4):34-38.
- **Kranz, William**, Joel Cahoon, Norman Klocke, Richard Axvig, and Vernon Hoffman. 2000. *Crop residue and irrigation water management*. In: Conservation Tillage Systems and Management. MWPS-45 Second Edition; Chapter 5. pp. 23-28.
- Scherer, Thomas F., **William Kranz**, Donald Pfof, Hal Werner, Jerry Wright, and C. Dean Yonts. 1999. Sprinkler Irrigation Systems. Midwest Plan Service publication MWPS-30, Ames, IA 250 pp. Provides a complete description of how to evaluate field sites for installation of sprinkler irrigation systems.

Video and DVD:

- Watts, D.W., **W.L. Kranz**, C.D. Yonts. 2005. Assuring Efficient Center Pivot Irrigation. DVD. UNL Extension Division.
- **Kranz W.L.**, Chuck Burr, John Hay, Jim Schild, and C.D. Yonts, 2008. Using Chemigation Safely and Effectively. DVD. UNL Extension Division.

WebPages:

- **Kranz, William**, and C.D. Yonts. 2012. Using Chemigation Safely and Effectively. Webpage URL: <http://water.unl.edu/web/cropswater/chemigation>. UNL Extension Division.
- **Kranz, William**, and David Aiken. 2010. Nebraska Water Regulations and Policies. Webpage URL: <http://water.unl.edu/web/cropswater/regulations>. UNL Extension Division.

