Technology Transfer from Subsurface Drip Irrigation Studies
KSU Northwest Research-Extension Center, March 1989 – February 10, 2009

BOOKS AND BOOK CHAPTERS


REFEREED JOURNAL ARTICLES


NATIONAL ASABE PAPERS


**NATIONAL & INTERNATIONAL CONFERENCES**


KWRRI REPORTS


MID-CENTRAL REGIONAL ASAE PAPERS


CENTRAL PLAINS IRRIGATION CONFERENCE


**EXPERIMENT STATION PUBLICATIONS**


COOPERATIVE EXTENSION PUBLICATIONS


DEPARTMENTAL STAFF PAPERS

MAGAZINE ARTICLES


MISCELLANEOUS TECHNOLOGY TRANSFER

Presentation of Corn irrigation macromanagement at the seasonal boundaries – Initiating and terminating the irrigation season, at the Monsanto Sustainability Conference, Denver February 11-13, 2009, Denver.

Discussion of SDI research with USDA RRF Regional Project W1128, Portland, Oregon, October 22-24, 2008.

Presentation of historical aspects of KSU-NWREC and agriculture plus tour of SDI facilities to Farm Bureau Masters Tour, Colby Kansas, Oct. 8, 2008.

Tour and discussion of SDI facilities with Michael Dowgert, Netafim USA, August 20, 2008.

Tour and discussion of SDI facilities and other irrigation topics for KSU Agricultural Economics faculty, June 17, 2008.

Poster presentation of Alfalfa production with subsurface drip irrigation (SDI) at the KSU-NWREC spring field day, June 5, 2008.

Tour and discussion of SDI facilities and other irrigation topics for KSU Biological and Agricultural Engineering Department Chair, Gary Clark, May 13, 2008.

News release, Pioneer, KSU research recommends irrigating through grain filling stage, Pioneer Hi-Bred Crop Insights, April, 2008. Pioneer Hi-Bred Crop Insights, April, 2008.

News release, Safely delaying the first irrigation of corn, Pioneer Hi-Bred Crop Insights, April, 2008.


Poster presentation of Livestock Wastewater use through SDI – A Pilot Project at Central Plains Irrigation Conference, February 19-20, 2008, Greeley, Colorado.


Poster presentation of Software for Planning Corn Production with SDI at Central Plains Irrigation Conference, February 19-20, 2008, Greeley, Colorado.

Presentation of Progress with SDI research at Kansas State University to Victory Electrical Coop annual irrigation meeting, Dodge City, Kansas, February 8, 2008.

Poster presentation of SDI in the Great Plains to Victory Electrical Coop annual irrigation meeting, Dodge City, Kansas, February 8, 2008

Poster presentation of Livestock Wastewater use through SDI – A Pilot Project to Victory Electrical Coop annual irrigation meeting, Dodge City, Kansas, February 8, 2008

Poster presentation of Economics of SDI for Corn to Victory Electrical Coop annual irrigation meeting, Dodge City, Kansas, February 8, 2008


Presentation of Progress with SDI research at Kansas State University to Farmland Coop Employees, Sterling Colorado, February 7, 2008.

Presentation of Subsurface drip irrigation (SDI) in Kansas to key universities in India, Delhi, India, January 5, 2008.

Presentation of Subsurface drip irrigation (SDI) in Kansas, A. N.G. Ranga Agricultural University, Hyderabad, India, January 2, 2008.

Discussion of SDI research with USDA RRF Regional Project W1128, Honolulu, Hawaii, October 9-11, 2007.

SDI facilities tour and discussion for class from Sacred Heart Grade School, Colby, Kansas, October, 2007.

Presentation of historical aspects of KSU-NWREC and agriculture plus tour of SDI facilities to Farm Bureau Masters Tour, Colby Kansas, Oct. 4, 2007.


SDI facilities tour and discussion for one producer, two USDA-ARS Scientists and three KSU staff, August 29, 2007

Hosted G. Li, China Agricultural University, Beijing, China, July 12, 2007 for discussions and facility tours concerning SDI.

SDI facilities tour and irrigation discussion for Ag In the Classroom group, July 12, 2007


Ogallala Aquifer Project written report, **Comparison of LEPA and SDI for corn, sunflower and soybean**, F.R. Lamm, Lubbock, Texas, March 12-14, 2007.

Ogallala Aquifer Project written report, **Software to compare SDI and CP sprinkler economics**, F.R. Lamm and L. Almas, Lubbock, Texas, March 12-14, 2007.

Ogallala Aquifer Project written report, **Strategies for improved crop germination with SDI in Kansas and Texas**, F.R. Lamm, Lubbock, Texas, March 12-14, 2007.


Poster presentation of **Livestock Wastewater use through SDI – A Pilot Project** at Central Plains Irrigation Conference, February 27-28, 2007, Kearney, Nebraska.


Poster presentation of **Economics of SDI for Corn** at Central Plains Irrigation Conference, February 27-28, 2007, Kearney, Nebraska.

Poster presentation of **Software for Planning Corn Production with SDI** at Central Plains Irrigation Conference, February 27-28, 2007, Kearney, Nebraska.


Discussion of SDI and other water related topics with Tom Elliot, Boston Massachusetts at Colby, Kansas, November 17, 2006.

Presentation of historical aspects of KSU-NWREC and agriculture plus tour of SDI facilities to Farm Bureau Masters Tour, Colby Kansas, Oct. 6, 2006.

Discussion with J. Bordovsky, TAMU at Plainview Texas of SDI and other water-related projects, September 6, 2006.

Discussion with T. Howell, P. Colaizzi, and S. Evett, USDA-ARS, Bushland Texas of SDI and other water-related projects, September 6, 2006.

Discussion with Nicholas Farms staff, Big Bow, Kansas about SDI progress and problems, September, 4, 2006.

Presentation of **There ain’t no such thing as a free supper** and general discussion of SDI and other irrigation technologies to Leadership Kansas Class of 2006, Hays, Kansas, August 25, 2006.


Demonstration to U. S. Congressional Aides of COpt_SDI.xls, an MS Excel template to determine optimum planned corn area and plant population for SDI, at Manhattan, Kansas, August 17, 2006.

Discussion with Mike Bartolo, CSU, Rocky Ford, Colorado of microirrigation projects in the Ark Valley, August 9, 2006.

Tour of SDI facilities and discussion of SDI projects at NWREC, Colby Kansas with Naftali Lazarovitch, from the Ben-Gurion University of the Negev, Israel, August 7-9, 2006.

Presented SDI facilities and information as a portion of a NWREC tour for Kansas Black Farmers Assoc. and USDA-NRCS staff, Colby, Kansas, July 26, 2006.

Presentation of **Current irrigation technologies and their role in efficient use of water** at the Water and Future of Kansas conference, Topeka, Kansas, March 16, 2006.

Ogallala Aquifer Project written report, **Effect of dripline depth on corn, sunflower and soybean**, F.R. Lamm, Amarillo, Texas, March 7-9, 2006.

Ogallala Aquifer Project written report, **Effects of pre- and post anthesis stress and N placement on corn**, F.R. Lamm, Amarillo, Texas, March 7-9, 2006.

Ogallala Aquifer Project written report, **Installation effects on SDI flowrates and uniformity**, F.R. Lamm and G.A. Clark, Amarillo, Texas, March 7-9, 2006.

Ogallala Aquifer Project written report, **Comparison of LEPA and SDI for corn, sunflower and soybean**, F.R. Lamm, Amarillo, Texas, March 7-9, 2006.

Ogallala Aquifer Project written report, **Software to compare SDI and CP sprinkler economics**, F.R. Lamm and L. Almas, Amarillo, Texas, March 7-9, 2006.

Ogallala Aquifer Project written report, **Strategies for improved crop germination with SDI in Kansas and Texas**, F.R. Lamm, Amarillo, Texas, March 7-9, 2006.
Discussion of SDI and other water-related topics with Kansas agency and farm-related groups, Manhattan, Kansas, March 17, 2006.

CD of SDI website distributed to participants of Central Plains Irrigation Conference, February 21-22, 2006, Colby, Kansas.


Poster presentation of Livestock Wastewater use through SDI – A Pilot Project at Central Plains Irrigation Conference, February 21-22, 2006, Colby, Kansas.


Participant and discussant in the Western Irrigation SDI Management and Maintenance meeting, Garden City, Kansas, February 14, 2006.

Poster presentation of SDI in the Great Plains at the Western Irrigation SDI Management and Maintenance meeting, Garden City, Kansas, February 14, 2006.

Poster presentation of Livestock wastewater use through SDI – A Pilot project at the Western Irrigation SDI Management and Maintenance meeting, Garden City, Kansas, February 14, 2006.

Poster presentation of Optimum fertigation for corn using SDI at the Western Irrigation SDI Management and Maintenance meeting, Garden City, Kansas, February 14, 2006.

Discussion of SDI and other water related topics with KSU COA and COE administrators, Manhattan, Kansas, February 10, 2006.

Presentation of Progress with SDI research at Kansas State University at annual KARA meeting, January, 18, 2006, Salina, Kansas.

Discussion and tour of SDI at KSU-NWREC, Colby, Kansas with Li Guangyong, China Agricultural University, November 11, 2005

Presentation of SDI research results to USDA-RRF W1128 regional project concerning microirrigation, Phoenix, Arizona, November 2-4, 2005.

Discussion of SDI and irrigation efficiency with USDA-NRCS Kansas staff at Manhattan, Kansas, October 13, 2005.

Discussion and tour of SDI and other topics with regional Farm Bureau group at Colby, Kansas, October 6, 2005

Discussion and tour of SDI with representative of Netafim Irrigation at Colby Kansas, September 2005

Discussion of SDI and other irrigation topics with area representatives of Pioneer Hi-Bred International, August 22, 2005.

Discussion of SDI and Water Conservation research with US Congressional Aides, Hays Kansas, August 17, 2005.

Tour and discussion of SDI and other irrigation topics with scientist Graham Harris from Victoria, Australia, August 10-11, 2005.

Tour and discussion of SDI with farmer Garry Morrison from Victoria, Australia, August 7, 2005.

Discussion of SDI and other irrigation topics for Kuska family reunion, July 30, 2005.

Hosted Visiting Scientist, Gerard Arbat, University of Girona, Spain from June 29 to October 1, 2005.

Tour and discussion of SDI research with Tom Doerge, Pioneer Hi-Bred International, July 5, 2005.

Field Tour of SDI research installation at KSU-NWREC, June 22, 2005 for UAP representatives. Approximately 25 in attendance.

Poster presentation of Minimum System Requirements with SDI at KSU Sedgwick County SDI Field Day, Wichita, Kansas, June 1, 2005.

Poster presentation of Improved irrigation water management with SDI at KSU Sedgwick County SDI Field Day, Wichita, Kansas, June 1, 2005.

Poster presentation of What is SDI? at KSU Sedgwick County SDI Field Day, Wichita, Kansas, June 1, 2005.

Poster presentation of SDI, Pros and Cons at KSU Sedgwick County SDI Field Day, Wichita, Kansas, June 1, 2005.

Poster presentation of Nutrient Management with SDI at KSU Sedgwick County SDI Field Day, Wichita, Kansas, June 1, 2005.

Oral presentation of Ogallala Aquifer Projects that included SDI, Garden City, Kansas, March 8-10, 2005.


Presentation of *Design and management considerations for SDI* at SDI meeting, Sublette, Kansas, March 3, 2005.

Presentation of *SDI research for corn production in Kansas, 16 years of progress* at SDI meeting, Sublette, Kansas, March 3, 2005.

Presentation of *Center pivot sprinkler and SDI economic comparisons* at SDI meeting, Sublette, Kansas, March 3, 2005.

Poster presentation of *SDI in the Great Plains* at SDI meeting at Sublette, Kansas, March 3, 2005.

Poster presentation of *Using livestock wastewater with SDI* at SDI meeting at Sublette, Kansas, March 3, 2005.

Poster presentation of *Nitrogen fertilization for corn production using SDI* at SDI meeting at Sublette, Kansas, March 3, 2005.

Presentation of *SDI research for corn production in Kansas, 16 years of progress* at NICCA annual meeting, Kearney, Nebraska, Feb. 21, 2005.

*Economic comparison of SDI and center pivot sprinklers* at Arkansas Valley Farm and Ranch Symposium, January 6, 2005.

Oral presentation of *SDI research results* in Kansas at University of Missouri Crop Management School, Columbia, Missouri, Dec. 16-17, 2004.

Poster presentation of *SDI in the Great Plains* at University of Missouri Crop Management School, Columbia, Missouri, December 16-17, 2004.

Poster presentation of *Using livestock wastewater with SDI* at University of Missouri Crop Management School, Columbia, Missouri, December 16-17, 2004.

Presentation of SDI research results to USDA-RRF W1128 regional project concerning microirrigation, Tampa, FL, November 17-19, 2004.

Oral presentation of *“Steps to a successful SDI system”* at KSU Scandia Experimental Field, August 24, 2004.

Oral presentation of *“Minimum system requirements with SDI”* at KSU Scandia Experimental Field, August 24, 2004.

Poster presentation of *“Can we make SDI pay”* at KSU Scandia Experimental Field, August 24, 2004.

Poster presentation of *“What is SDI”* at KSU Scandia Experimental Field, August 24, 2004.

Poster presentation of *“Improved irrigation water management with SDI”* at KSU Scandia Experimental Field, August 24, 2004.

Discussion of SDI with Governor’s Subcabinet on Water, Manhattan, Kansas, August 23, 2004.


Oral and Poster presentation of *Comparison of SDI and simulated LEPA sprinkler irrigation for corn* at SDI Technology Field Day, at NWREC, August 10, 2004.


Poster presentation of *Improved irrigation water management with SDI* at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of *Minimum system requirements with SDI* at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of *Steps to a successful SDI system* at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of *Can we make it pay?* at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of *Can we make it work?* at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of *Determination of the appropriate dripline flushing velocity* at SDI Technology Field Day, at NWREC, Aug. 10, 2004.
Poster presentation of **Nutrient management with SDI** at SDI Technology Field Day, at NWREC, August 10, 2004.


Poster presentation of **The Ogallala and the potential for SDI** at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of **SDI, Pros and Cons** at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of **Optimal plant populations for corn using SDI** with limited well capacities at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of **Spacing of driplines for corn production** at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of **Using SDI and LEPA sprinkler irrigation to apply swine wastewater -- A progress report** at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of **K-State's permanent bed system** for SDI at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of **Slope considerations for SDI** at SDI Technology Field Day, at NWREC, August 10, 2004.

Poster presentation of **Filtration for SDI systems** at SDI Technology Field Day, at NWREC, August 10, 2004.

SDI tour and discussion for Kansas Farm Appraisers Assn. at NWREC, July 15, 2004.

Discussion and tour of SDI research with Tom Doerge, July 6, 2004.

Hosted Dr. Jaume Puig, University of Girona (Spain) from May 16-September 3, 2004 to conduct SDI research on dripline flushing velocity.

Discussion with 6 Pioneer HiBred Inc. personnel about SDI and other irrigation technologies, March 19, 2004.


CD of SDI website distributed to participants of Western Irrigation Operation and Maintenance Workshop, Feb 24, 2004, Garden City, Kansas.

Poster presentation of **SDI in the Great Plains** at Western Irrigation Operation and Maintenance Workshop, Feb 24, 2004, Garden City, Kansas.

Poster presentation of **Using livestock wastewater with SDI** at Western Irrigation Operation and Maintenance Workshop, Feb 24, 2004, Garden City, Kansas.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at Western Irrigation Operation and Maintenance Workshop, Feb 24, 2004, Garden City, Kansas.


Presentation of **SDI in the Great Plains region with a few glances elsewhere** at Powell Agricultural and Irrigation Technologies meeting, Powell, Wyoming, Feb. 6, 2004.

Presentation of **Design and management considerations for SDI** at Powell Agricultural and Irrigation Technologies meeting, Powell, Wyoming, Feb. 6, 2004.
Presentation of **Filtration and maintenance considerations for SDI** at Powell Agricultural and Irrigation Technologies meeting, Powell, Wyoming, Feb. 6, 2004.

Presentation of **Center pivot sprinkler and SDI economic comparisons** at Powell Agricultural and Irrigation Technologies meeting, Powell, Wyoming, Feb. 6, 2004.

CD of SDI website distributed to participants of Powell Agricultural and Irrigation Technologies meeting, Powell, Wyoming, Feb. 6, 2004.


Poster presentation of **Using livestock wastewater with SDI** at Powell Agricultural and Irrigation Technologies meeting, Powell, Wyoming, Feb. 6, 2004.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at Powell Agricultural and Irrigation Technologies meeting, Powell, Wyoming, Feb. 6, 2004.

Presentation of second year’s research results for SDI Frequency study to Corn Commission, January 22, 2004. Presentation by Rob Aiken.

Presentation of **SDI in the Great Plains region with a few glances elsewhere** at Victory Electric Irrigation meeting, Dodge City, Kansas, January 22, 2004.

Poster presentation of **SDI in the Great Plains** at Victory Electric Irrigation meeting, Dodge City, Kansas, January 22, 2004.

Poster presentation of **Using livestock wastewater with SDI** at Victory Electric Irrigation meeting, Dodge City, Kansas, January 22, 2004.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at Victory Electric Irrigation meeting, Dodge City, Kansas, January 22, 2004.

Presentation and discussion of SDI results to USDA-RRF W-128 Microirrigation Committee, Davis, California, October 22-24, 2003.


Presentation of **SDI Research for corn production in Kansas, 14 years of progress** at the KSU-SWREC Field Day, Garden City, KS, Aug. 28, 2003.

Presentation to US Congressional Aides Tour of **Improved irrigation water management with SDI**, Manhattan, Kansas, August 6, 2003.

Presentation of **SDI in the Great Plains** at the SDI and Sweet Corn Production Tour, Ulysses Kansas, July 9, 2003.


Participant and resource person for Western Irrigation SDI Operation and Maintenance meeting, Feb. 20, 2003.

CD of SDI website distributed to participants of Western Irrigation SDI Operation and Maintenance meeting, Feb. 20, 2003.

Poster presentation of **SDI in the Great Plains** at Western Irrigation Operation and Maintenance Workshop, Feb 20, 2003, Garden City, KS.

Poster presentation of **Using livestock wastewater with SDI** at Western Irrigation Operation and Maintenance Workshop, Feb 20, 2003, Garden City, Kansas.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at Western Irrigation Operation and Maintenance Workshop, Feb 20, 2003, Garden City, Kansas.


Research application summary (Economically optimal corn plant population at various capacities using SDI) and Excel spreadsheet (Copt_SDI.xls) for Pioneer HiBred Intl., January, 24, 2003.

Presentation of first year’s research results for SDI Frequency study to Corn Commission, January 10, 2003.

Poster presentation of **SDI in the Great Plains** at Victory Electric Irrigation meeting, Dodge City, KS, 1-6-03.

Poster presentation of **Using livestock wastewater with SDI** at Victory Electric Irrigation meeting, Dodge City, KS, 1-6-03.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at Victory Electric Irrigation meeting, Dodge City, KS, 1-6-03.

Presentation of **SDI for corn production in Kansas** at SDI meeting in Belleville, Kansas, December 18, 2002.

Presentation of **Design and management considerations for SDI** at SDI meeting in Belleville, Kansas, December 18, 2002.

Poster presentation of **SDI and the Great Plains** at SDI meeting in Belleville, Kansas, December 18, 2002.

Poster presentation of **Livestock wastewater use with SDI: A pilot project** at SDI meeting in Belleville, Kansas, December 18, 2002.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at SDI meeting in Belleville, Kansas, December 18, 2002.


Presentation of **SDI for corn production in Kansas** at SDI meeting in Wichita, Kansas, December 17, 2002.

Presentation of **Design and management considerations for SDI** at SDI meeting in Wichita, Kansas, December 17, 2002.

Poster presentation of **SDI and the Great Plains** at SDI meeting in Wichita, Kansas, December 17, 2002.

Poster presentation of **Livestock wastewater use with SDI: A pilot project** at SDI meeting in Wichita, Kansas, December 17, 2002.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at SDI meeting in Wichita, Kansas, December 17, 2002.

Computer presentation of **Economic comparison of SDI & center pivot sprinklers for corn: Sensitivity to key factors** at SDI meeting in Wichita, Kansas, December 17, 2002.

Presentation of **SDI for corn production in Kansas** to Groundwater Conservation for S.W. Kansas, Dodge City, KS, Nov. 20, 2002.

Discussion of SDI with Valmont Industries, Kearney, NE, Nov, 6, 2002.


Discussion of SDI with Colorado crop consultant at NWREC SDI site, October 17, 2002.
Tour and discussion of SDI facilities for NRCS, two Univ of Nebraska personnel and 3 Nebraska producers, September 9, 2002.

Tour and discussion of SDI facilities for a Nebraska producer, August 21, 2002.

Tour and discussion of SDI facilities for four Colorado producers, August 13, 2002.

Tour and discussion of SDI facilities for two Univ. of Nebraska faculty, July 24, 2002.

Tour and discussion of SDI facilities for Dr. Tom Thompson, Univ. of Arizona and a Kansas producer, July 16, 2002.

Discussion of using beef lagoon wastewater through SDI systems for Mid-America State Depts. of Agriculture for Kansas Secretary of Agriculture Jamie Clover Adams near Sublette, Kansas, July 14, 2002.

Tour and discussion of SDI facilities for Kansas Water Authority (approximately 30 in attendance), July 10, 2002.

Tour and discussion of SDI facilities for NRCS and four producers from Colorado, July 10, 2002.

Discussion and tour of SDI research facility with engineering consultant from NE, March 23, 2002.

Poster presentation of SDI in the Great Plains at SDI meeting for producers, Courtland, KS, 3-21-02.

Poster presentation of Using livestock wastewater with SDI at SDI meeting for producers, Courtland, KS, 3-21-02.

Presentation of SDI Research for corn production for SDI at SDI meeting for producers, Courtland, KS, 3-21-02.

Presentation of Economic comparison of SDI & center pivot sprinklers for corn: Sensitivity to key factors at SDI meeting for producers, Courtland, KS, 3-21-02.

Poster presentation of SDI in the Great Plains at SDI meeting for producers, Courtland, KS, 3-21-02.

Poster presentation of Using livestock wastewater with SDI at SDI in-service for UNL and NRCS personnel, Hastings, NE, 3-20-02.

Presentation of SDI in the Great Plains at SDI meeting for producers, Courtland, KS, 3-21-02.

Poster presentation of Using livestock wastewater with SDI at SDI in-service for UNL and NRCS personnel, Hastings, NE, 3-20-02.

Presentation of Design and management considerations for SDI at SDI in-service for UNL and NRCS personnel, Hastings, NE, 3-20-02.


Presentation of Irrigation capacity and plant population effects on corn production at SDI meeting in Hugoton, Kansas, Feb 20, 2002.

Poster presentation of Livestock wastewater use with SDI: A pilot project at SDI meeting in Hugoton, Kansas, Feb 20, 2002.

Presentation of Design and management considerations for SDI at SDI meeting in Hugoton, Kansas, Feb 20, 2002.

Poster presentation of SDI in the Great Plains at SDI meeting in Garden City, Kansas, Feb 19, 2002.

Poster presentation of Livestock wastewater use with SDI: A pilot project at SDI meeting in Garden City, Kansas, Feb 19, 2002.


Presentation of Irrigation capacity and plant population effects on corn production at SDI meeting in Garden City, Kansas, Feb 19, 2002.

Poster presentation of SDI and the Great Plains at SDI meeting in Garden City, Kansas, Feb 19, 2002.
Production of Design and management considerations for SDI at SDI meeting in Colby, Kansas, Feb 18, 2002.

Presentation of Irrigation capacity and plant population effects on corn production at SDI meeting in Colby, Kansas, Feb 18, 2002.

Poster presentation of SDI and the Great Plains at SDI meeting in Colby, Kansas, Feb 18, 2002.


Poster presentation of Livestock wastewater use with SDI: A pilot project at Plains at SDI meeting in Colby, Kansas, Feb 18, 2002.

Presentation of Design and management considerations for SDI at SDI meeting in North Platte NE, Feb 12, 2002.

Presentation of Irrigation capacity and plant population effects on corn production at SDI meeting in North Platte, NE, Feb 12, 2002.

Presentation of Economic comparison of center pivot sprinklers and SDI for corn production at SDI meeting in North Platte, NE, Feb 12, 2002.

Poster presentation of SDI and the Great Plains at SDI meeting in North Platte, NE, Feb 12, 2002.

Presentation of Economic comparison of center pivot sprinklers and SDI for corn production at SW Kansas Irrigators, Association meeting, Feb 1, 2002.

Presentation of Irrigation capacity and plant population effects on corn production using SDI at Western Kansas Irrigation Workshop, Goodland, KS, January 10, 2002.


Tour of SDI facilities for group of approximately 20 Farm Bureau members from Kansas, Sept. 27, 2001.

Tour of SDI facilities for group of 20 producers from Australia, August 28, 2001.

Presentation to Kansas Congressional Aides about USDA Special Grant Water conservation--Increased efficiency in usage, August 14, 2001.


Tour of SDI facilities for KSU 4-H Wheat Show meeting, August 8, 2001. Approximately 35 in attendance.


Poster presentation of SDI Research and Extension efforts at K-State -- 12 years and counting, SDI Technology Field Day, August 7, 2001.

Poster presentation of What is subsurface drip irrigation (SDI)?, SDI Technology Field Day, August 7, 2001.


Mini-tour of SDI facilities for Ogallala Management Taskforce, July 26, 2001. 4 in attendance.


Interviewed by Carl Kistler, reporter from Furrow magazine about SDI and wastewater, June 18, 2001.


Poster presentation of **SDI in the Great Plains** at Crop Modeling Workshop, Univ. of Nebraska, Lincoln, NE, Dec. 4-7, 2000.

Poster presentation of **Economics of SDI for corn production** at Crop Modeling Workshop, Univ. of Nebraska, Lincoln, NE, Dec. 4-7, 2000.

Poster presentation of **Utilizing livestock wastewater with SDI** at Crop Modeling Workshop, Univ. of Nebraska, Lincoln, NE, Dec. 4-7, 2000.

Poster presentation of **Nitrogen fertilization for corn production** using SDI at Crop Modeling Workshop, Univ. of Nebraska, Lincoln, NE, Dec. 4-7, 2000.

Extensive 1.5 hour consultation with 3 UNL faculty in Agronomy Dept. about utilization of SDI for research, Dec 6, 2000.


Tour of NWREC SDI facilities and discussion of SDI with group from Netafim and Cascade Earth Sciences (4), Sep. 26, 2000.
Tour of NWREC SDI facilities and discussion of SDI with group from Kansas Farm bureau (13), Sep. 26, 2000.


Tour of NWREC SDI facilities and discussion of SDI with 4 faculty from University of Nebraska, Sep. 14, 2000.


Tour of NWREC SDI facilities and discussion of SDI with UNL tour group of 35 people, Aug. 26, 2000.


Tour of NWREC SDI facilities and discussion of SDI with UNL tour group led by Mark Golembolski, July 26, 2000.


Extensive phone call consultation with Dean Yonts, UNL-Scottsbluff on SDI design operation and management, May 4, 2000.

Tour and discussion of SDI facilities with Jim Phene, Netafim Irrigation, April 12, 2000.

Tour of NWREC SDI facilities and discussion of SDI with 2 faculty from Colorado State University, Apr. 3, 2000.

Tour of NWREC SDI facilities for Gerard Kluitenberg, Mar. 21, 2000.

Developed MiBook website to manage and coordinate revision of book Microirrigation for crop production, design operation and management, 2000.


Poster presentation of Economics of SDI for corn production at county meeting, Pratt, KS, Jan. 20, 2000.


KS Legislative Aides Tour, 40 in attendance, Midwest Feeders, Ingalls, KS, Oct. 27, 1999.


KS Legislative Aides Tour, 40 in attendance, Midwest Feeders, Ingalls, KS, Oct. 27, 1999.


Presentation of **Research results with corn and SDI** at Irrigation County Agent Update, Garden City, KS, Nov. 10, 1998.
Presentation of **Design and management considerations for subsurface drip irrigation systems** at Irrigation County Agent Update, Garden City, KS, Nov. 10, 1998.
Presentation of **Research with SDI and corn** at the USDA RRF W-128 regional project meeting, San Diego, CA, Oct. 29-31, 1998.
Presentation of **Research with SDI and corn** to legislative aides, Manhattan, KS, Aug. 1998.
Discussion of SDI and field tour of NWREC SDI research site for Nelson Irrigation, Sept. 21, 1998.


Invited speaker for written presentation of SDI and the Great Plains, at the 60th annual Bushland Field Day, USDA-ARS, Bushland, TX, Aug. 12, 1998.

Tour of NWREC SDI research site, Colby, KS and SDI wastewater site, Ingalls, KS for Netafim Irrigation, June 1998.

Tour of NWREC SDI research site for Nelson Irrigation, May 1998.


Presentation of Livestock wastewater utilization with SDI: A pilot project, for the K-State President's Tour at Ingalls, KS, June 30, 1998.

Two radio interviews by Brandon Jaap, KFRM 550 AM on SDI, March 31, 1998.


Presentation of Design and management considerations for SDI systems at county meeting, Rush Center, KS, Jan. 29, 1998.

Presentation of Design and management considerations for subsurface drip irrigation systems at county meeting, Garden City, KS, Jan. 30, 1998.


Presentation of KSU's SDI research on corn to the Western Regional RRF Project W-128, Nov. 6-7, 1997, Fresno, CA.


Numerous e-mail requests for SDI research information, apparently in response to participation in Trickle-L, an e-mail discussion group on microirrigation, 1997-2003.

Guided tour of subsurface drip irrigation facilities and discussion of research for Colby Middle School Advanced Science Class, Oct. 16, 1997.

Guided tour of subsurface drip irrigation facilities and discussion of research for Lindsay and Helen Ward, visitors from Australia, Oct. 6, 1997.


Guided tour of subsurface drip irrigation facilities and discussion of research for Kansas Water Office Director, Aug. 6, 1997.
Guided tour of subsurface drip irrigation facilities and discussion of research for University of Nebraska faculty and staff, Feb. 5, 1997.

Presentation of SDI for corn production at 4-States Irrigation Council annual meeting, Jan. 8, 1997, Ft. Collins, CO.

Presentation of Economics of SDI for corn production at 14th annual Water and the Future of KS. Conference, March 4-5, 1997, Manhattan, KS.

Presentation of Design and management considerations for subsurface drip irrigation systems at NW County Agent Update, Dec. 19, 1996, Hoxie, KS.

Presentation of Design and management considerations for subsurface drip irrigation systems at SDI meeting, Dec. 12, 1996, Hugoton, KS.

Presentation of KSU's SDI research on corn to the Western Regional RRF Project W-128, Nov. 1-2, 1996, San Antonio, TX.

Presentation of Subsurface drip irrigation for corn to the Innovations in Agriculture, Sustainable Agriculture in the 21st Century Tour, Sept. 18, 1996, Colby, KS.

Coordination and presentations at the Irrigation Technology Field Day, Aug. 20, 1996, Colby, KS.

Coordination of the SDI Technology Session following the 13th Annual Water and the Future of Kansas Conference, March 6, 1996, Colby, KS.

Presentation of Design and management considerations for subsurface drip irrigation systems at SDI Technology Session following the 13th Annual Water and the Future of KS. Conference, March 6, 1996, Colby, KS.

Presentation of Subsurface drip irrigation research for corn at SDI Technology Session following the 13th Annual Water and the Future of Kansas Conference, March 6, 1996, Colby, KS.

Presentation of KSU's permanent bed system for corn production using SDI at SDI Technology Session following the 13th Annual Water and the Future of Kansas Conference, March 6, 1996, Colby, KS.

Presentation of An economic comparison of alternative irrigation systems on small and irregularly shaped fields at Central Nebraska Irrigation Short Course, Feb. 15, 1996, Holdrege, NE.

Presentation of Design and management considerations for subsurface drip irrigation systems at Central Nebraska Irrigation Short Course, Feb. 15, 1996, Holdrege, NE.

Presentation of Subsurface drip irrigation research for corn at Central Nebraska Irrigation Short Course, Feb. 15, 1996, Holdrege, NE.

Presentation of Subsurface drip irrigation research for corn at Northwest Kansas Corn Growers meeting, Jan. 30, 1996, Colby, KS.

Presentation of KSU's SDI research on corn to the Western Regional RRF Project W-128, Oct. 16-17, 1995, Lansing, MI.

Presentation of Drip irrigation in row crop farming at the High Plains Irrigation Conference and Trade Show, Amarillo, TX, Jan. 5, 1995.


Guided tour of subsurface drip irrigation facilities and discussion of research for the Kansas Production Credit Bankers Council, June 1995.

Guided tour of subsurface drip irrigation facilities and discussion of research for a group of crop nutrition scientists, Aug. 1995.

Guided tour of subsurface drip irrigation facilities and discussion of research for the Kansas Section ASAE, Oct. 1995.

Presentation of KSU's SDI research on corn to the Western Regional RRF Project W-128, Oct. 25-27, 1994, Kona, HI.


Guided tour of subsurface drip irrigation facilities and discussion of research for the Four States Irrigation Council, Aug. 18, 1993.
Presentation of **KSU's SDI research on corn** to the Western Regional RRF Project W-128, April 28-30, 1993, Bradenton, FL.

Presentation of **Using drip irrigation for a nontraditional crop -- evaluating the practice for irrigated corn** at the Southwest Kansas Irrigators Assn. annual meeting, Ulysses, KS, Jan. 31, 1993.

Presentation of **Drip irrigation studies at Colby** to Kansas Agriculture Rural Leadership (KARL) groups, Colby, KS, Feb. 21, 1992 (1st class) and Jan. 15, 1992 (2nd class).

Presentation of **Drip irrigation studies at Colby** to SCS staff and farmers from Nebraska, Dec. 6, 1992.

Presentation of **Managing subsurface drip irrigation systems for corn** at the 1992 KSU SWREC Fall Field Day.

Presentation of **Drip irrigated corn studies** to the Kansas Water Office staff, Manhattan, KS, April 29, 1992.

Poster entitled **Drip irrigation for corn production--the research approach in western Kansas** at the Annual Conference of KSU CES-AES, Manhattan, KS, April 1992.


Presentation of SDI at the 1991 KSU NWREC Fall Field Day.

Presentation of **Drip irrigated corn studies** at the 8th Annual Water and the Future of Kansas Conference, Manhattan, KS, March 4-5, 1991.

Poster entitled **Water requirements of drip-irrigated corn** at the Central Plains Irrigation Short Course, North Platte, NE, Feb. 5-6, 1991.

Poster entitled **Preliminary highlights from a dripline spacing study** at the Central Plains Irrigation Short Course, North Platte, NE, Feb. 5-6, 1991.


Poster entitled **Design and installation of a drip irrigation system for research purposes** at the Central Plains Irrigation Short Course, Wray, CO, Feb. 1990.

Presentation of **SDI at Colby, KS** to the 1990 Nebraska Irrigation Tour sponsored by the University of Nebraska, Aug. 6, 1990.

Poster entitled **Design and installation of a drip irrigation system for research purposes** at the KAES-Cooperative Extension Annual Conference, Manhattan, KS, Oct. 1989

Presentation of SDI research at 1989 Fall Field Day of the KSU Northwest Research-Extension Center.