

Technology Transfer from Subsurface Drip Irrigation Studies

KSU Northwest Research-Extension Center, March 1989 – February 10, 2009

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Lamm, F.R., D.H. Rogers, and W.E. Spurgeon. 1995. **Design and management considerations for subsurface drip irrigation systems.** In Proc. Central Plains Irrigation Short Course, Garden City, KS, Feb. 7-8, 1995. Available from KSU Extension Agricultural Engineering, Manhattan, KS. pp. 148-155.

Lamm, F.R., W.E. Spurgeon, H.L. Manges, and D.H. Rogers. 1995. **Subsurface drip irrigation research for corn.** In Proc. 1995 Central Plains Irrigation Short Course, Garden City, KS, Feb. 7-8, 1995. Available from KSU Extension Ag Engr, Manhattan, KS. pp. 156-159.

Dhuyvetter, K.C., F.R. Lamm, and D.H. Rogers. 1995. **An economic comparison of subsurface drip irrigation (SDI) and center pivot irrigation for field corn.** In Proc. 1995 Central Plains Irrigation Short Course, Garden City, KS, Feb. 7-8, 1995. Available from KSU Ext. Agric. Engr., Manhattan, KS. pp. 139-147.

Lamm, F.R., D.H. Rogers, and W.E. Spurgeon. 1994. **Design and management considerations for subsurface drip irrigation systems.** In Proc. 1994 Central Plains Irrigation Short Course, Kearney, NE, Feb. 7-8, 1994. Available from KSU Ext. Agric. Engr., Manhattan, KS. pp. 98-105.

Lamm, F.R., W.E. Spurgeon, H.L. Manges, and D.H. Rogers. 1994. **Subsurface drip irrigation research for corn.** In Proc. 1994 Central Plains Irrigation Short Course, Kearney, NE, Feb. 7-8, 1994. Available from KSU Extension Ag. Engr., Manhattan, KS. pp. 107-110.

Lamm, F. R., W. E. Spurgeon, H. L. Manges, and D. H. Rogers. 1991. **Drip irrigation for corn production--the research approach in western Kansas.** In Proc. 1992 Central Plains Irrigation Short Course, Goodland, KS, Feb. 4-5, 1992. Available from KSU Ext. Ag. Engr., Manhattan, KS. pp. 87-92.

EXPERIMENT STATION PUBLICATIONS

Trooien, T.P., F.R. Lamm, L.R. Stone, M. Alam, D.H. Rogers, G.A. Clark, and A.J. Schlegel. 2000. **Two years of subsurface drip irrigation with lagoon wastewater.** pp. 21-23. In: SWREC Field Day report, Report of Progress 856. K-State Research and Extension, Manhattan, KS.

Trooien, T.P., F.R. Lamm, L.R. Stone, M. Alam, D.H. Rogers, G.A. Clark, and A.J. Schlegel. 1999. **Testing subsurface drip irrigation laterals with lagoon wastewater.** pp. 19-21. In: SWREC Field Day report, Report of Progress 837. K-State Research and Extension, Manhattan, KS.

Sunderman, H.D. and F.R. Lamm. 1996. **1996 Agricultural Research.** Report of Progress 764, June 1996. KAES, Manhattan, KS. 72 pp.

Williams, J.R., R.V. Llewelyn, M.S. Reed, F.R. Lamm, and D.R. Delano. 1996. **Economic analysis of alternative irrigation systems for continuous corn and grain sorghum in western Kansas.** Report of Progress 766, July 1996. KAES, Manhattan, KS. 46 pp.

Lamm, F.R. and H.D. Sunderman. 1995. **1995 Agricultural Research.** Report of Progress 741, Nov. 1995. KAES, Manhattan, KS. 66 pp.

Lamm, F.R., H.D. Sunderman, and J.R. Lawless. 1993. **1993 Agricultural Research.** Rep. of Progress 688, Aug. 1993. KAES, Manhattan, KS. 56 pp.

Sunderman, H.D., F.R. Lamm, and J.R. Lawless. 1992. **1992 Agricultural Research.** Rep. of Progress 660, June 1992. KAES, Manhattan, KS. 89 pp.

Lawless, J.R., H.D. Sunderman, and F.R. Lamm. 1991. **1991 Agricultural Research.** Rep. f Progress 635, Aug. 1991. KAES, Manhattan, KS. 87 pp.

Lamm, F. R., J.R. Lawless, and H.D. Sunderman. 1990. **1990 Agricultural Research.** Rep. of Progress 602, June 1990. KAES, Manhattan, KS. 78 pp.

COOPERATIVE EXTENSION PUBLICATIONS

Rogers, D., F. Lamm, T. Trooien, and M. Alam. 2006. **Subsurface drip irrigation (SDI) with livestock wastewater.** KSU Cooperative Ext. Irrigation Mgmt. Series, MF2727. 4 pp.

Lamm, F.R., D.H. Rogers, M. Alam and G.A. Clark. 2003. **Design considerations for subsurface drip irrigation (SDI) systems.** KSU Cooperative Ext. Irrigation Mgmt. Series, MF-2578. 8 pp.

Lamm, F.R., D.H. Rogers, M. Alam and G.A. Clark. 2003. **Management considerations for operating a subsurface drip irrigation (SDI) system.** KSU Cooperative Ext. Irrigation Mgmt. Series, MF-2590. 8 pp.

Rogers, D.H., F.R. Lamm, M. Alam, and G.M. Powell. 2003. **Shock chlorination for treatment for irrigation wells.** KSU Cooperative Ext. Irrigation Mgmt. Series, MF-2589. 4 pp.

Rogers, D.H., F.R. Lamm, and M. Alam. 2003. **Subsurface drip irrigation systems (SDI) water quality assessment guidelines.** KSU Cooperative Ext. Irrigation Mgmt. Series, MF-2575. 8 pp.

Rogers, D. H., F. R. Lamm, and M. Alam. 2003. **Subsurface drip irrigation (SDI) components: Minimum requirements.** KSU Cooperative Ext. Irrigation Mgmt. Series, MF-2576. 4 pp.

Alam, M., T.P. Trooien, F.R. Lamm, and D.H. Rogers. 2002. **Filtration and maintenance considerations for subsurface drip irrigation (SDI) systems.** KSU Cooperative Ext. Irrigation Mgmt. Series, MF-2361. Revised. 4 pp.

Alam, M., T.P. Trooien, F.R. Lamm, and D.H. Rogers. 1999. **Filtration and maintenance considerations for subsurface drip irrigation (SDI) systems.** KSU Cooperative Ext. Irrigation Mgmt. Series, MF-2361. 4 pp.

O'Brien, D., D.H. Rogers, F. Lamm, and G. Clark. 1997. **Economic comparison of SDI and center pivots for various field sizes.** KSU Cooperative Ext. Irrigation Management Series, MF-2242. 6 pp.

Dhuyvetter, K.C., F.R. Lamm, and D.H. Rogers. 1994. **Subsurface drip irrigation for field corn: An economic analysis.** KSU Cooperative Ext. Irrigation Management Series, L-909. 6 pp.

DEPARTMENTAL STAFF PAPERS

Williams, J.R., R.V. Llewelyn, M.S. Reed, F.R. Lamm, and D.R. Delano. 1996. **Net returns for grain sorghum and corn under alternative irrigation systems in western Kansas.** Dept. of Ag. Economics Staff Paper 96-3, March 1996. Kansas State University. 31 pp.

MAGAZINE ARTICLES

Holcombe, G. 2007. **Subsurface drip irrigation offers water-saving alternatives.** KSRE Informal Report to Kansas Legislature. pp. 26-27.

Stalcup, L. 2006. **Drip irrigation saves water, energy and time without hurting corn yields.** Corn and Soybean Digest. December 2006. 2 pp.

Lilleboe, D. 2005. **SDI primer.** The Sunflower 31(2):7. February.

Krebs, C. 2004. **Researcher helps row-crop farmers adopt drip irrigation.** 2 page article with one photo. Ag. Journal 57(25):6, 19. August 20, 2004.

Reichenberger, L. 2004. **Outlook for the Ogallala.** The Furrow, 109(2):20-21 with one photo.

Reichenberger, L. 2003. **Drip irrigation makes a splash.** The Furrow, 108(1):34-36.

Spiegel, B. 2002. **Design SDI for the long haul.** Kansas Farmer (April 2002) 140(7):12-13.

McCabe, D. 2002. **Uncover Water.** Two page article with comments from Freddie Lamm. Nebraska Farmer, March 2002. pp. 12-13.

Smith, Steve. 2002. **Converting to drip – The basics of converting from furrow to drip irrigation.** Irrigation Business and Technology, February 2002. pp. 26-28.

Ress, Steve. 2001. **Four States Irrigation Council tour visits western Kansas in July.** Water Current 33(5):5.

Rangel, V. 2000. **Lagoon wastewater re-use project in third season.** Irrigation Journal 50(5):17.

Spiegel, B. 2000. **Moo-ving wastewater by drip.** Irrigation Extra, pages IE1- IE4 with 3 color photos, a section in Kansas Farmer, Mid-January 2000. Also published in Nebraska and Texas magazines.

Newport, A. 2000. **Pivots or drip?** Irrigation Extra, pages IE10- IE13 with 2 color photos, a section in Kansas Farmer, Mid-January 2000. Also published in Nebraska and Texas magazines.

Trooien, T.P., F.R. Lamm, L.R. Stone, and M. Alam. 1999. **Irrigating corn with subsurface drip irrigation and lagoon wastewater.** Irrigation Journal 49(5):6-7.

Lamm, F.R., A.J. Schlegel, and G.A. Clark. 1998. **Optimum nitrogen fertigation for corn using SDI.** Feature article in International Water and Irrigation Review, 18(2):13-14, 16-18.

Ernst, Tanya, 1998. **SDI reduces water losses from evaporation, runoff.** Feature article in KSU Natural Resources and Environmental Management, Fall 1998. Page 4.

Peterson Jr., C., 1998. **Subsurface drip irrigation saves water.** Feature article about SW Kansas farmers using SDI with side box entitled **The good and the bad of subsurface drip irrigation**, covering comments by F. Lamm. Successful Farming, March 1998.

McCabe, D. 1998. **Plunging into drip.** Feature article about Nebraska farmer using SDI with comments by F. Lamm. Nebraska Farmer, Mid-Feb. 1998. pp. 8-9.

McAlavy, T. 1997. **K-State's drip irrigation research holds promise for farmers.** Article with 1 b/w photo in KSU Ag Report, fall 1997. pp 5.

McAlavy, T. 1997. **Drip irrigation research holds promise.** Article with 1 b/w photo in K-State Research and Extension Communicator, Jan-Mar. 1997. Page 4.

Claerhout, L. 1996. **SDI research: Taking water conservation one drop at a time.** Feature article with 1 b/w photo in Kansas State Agriculturalist, Spring 1996. Page 19.

Lamm, F.R., W.E. Spurgeon, H.L. Manges, and D.H. Rogers. 1993. **Using drip irrigation for a nontraditional crop.** Feature article with 1 color photo. Arab Water World, March/June 1993. Vol 17:2-3. pp 5-6.

Lamm, F.R., W.E. Spurgeon, H.L. Manges, and D.H. Rogers. 1992. **Drip irrigation for corn--a promising prospect.** Feature article with 3 photos, edited by Holly Gibson. Irrigation Journal, Mar. 1992. pp 12, 14-16.

Hallowell, L. 1992. **Drip irrigation in corn? A KSU study indicates it may be feasible.** Feature article with 2 color photos in NC+ Down to Earth Ideas. Vol 26(2):6-7.

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.

USDA-ARS news release, The Ogallala: Gauging, protecting the aquifer's health. April 2008. Discusses collaborative work.

Presentation of **Deficit Irrigation Management for Corn Production in Kansas: Handling Vegetative and Early Reproductive Period Water Stresses**, a study conducted specifically under subsurface drip irrigation, to Water and the Future of Kansas conference, Topeka, Kansas, March 25, 2008.

Poster presentation of **Comparing the economics of center pivot and subsurface drip irrigation systems** at Water and the Future of Kansas conference, March 2008, Topeka, Kansas.

Presentation of Ogallala Aquifer Project progress report, **Can Subsurface Drip Irrigation (SDI) be a Competitive Irrigation System in the Great Plains Region for Commodity Crops**, F.R. Lamm, Amarillo, Texas, March 11-13, 2008.

Ogallala Aquifer Project written report, **Comparison of LEPA and SDI for corn, sunflower, soybean and sunflower**, F.R. Lamm, Amarillo, Texas, March 11-13, 2008.

Ogallala Aquifer Project written report, **Strategies for improved crop germination with SDI in Kansas and Texas**, F.R. Lamm, Amarillo, Texas, March 11-13, 2008.

Ogallala Aquifer Project written report, **Evaluating TTT Technology for Irrigation of Corn in the Central Great Plains**, F.R. Lamm, Amarillo, Texas, March 11-13, 2008.

Distribution of SDI and the Great Plains CD-Rom, February 2008.

Poster presentation of **SDI in the Great Plains** at Central Plains Irrigation Conference, February 19-20, 2008, Greeley, Colorado.

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 **Economics of SDI for Corn** 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 **Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet – 2008**, to Farmland Coop Employees, Sterling Colorado, February 7, 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.

Poster presentation of **Minimum System Requirements with SDI** at KSU NWREC Field Day, Colby, Kansas, August 29, 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, **Effect of dripline depth on corn, sunflower and soybean**, F.R. Lamm, Lubbock, Texas, March 12-14, 2007.

Ogallala Aquifer Project written report, **Effects of pre- and post anthesis stress and N placement on corn**, F.R. Lamm, Lubbock, Texas, March 12-14, 2007.

Ogallala Aquifer Project written report, **Evaluating TTT technology for irrigation of corn in the Central Great Plains**, F.R. Lamm and R. M. Aiken, Lubbock, Texas, March 12-14, 2007.

Ogallala Aquifer Project written report, **Installation effects on SDI flowrates and uniformity**, F.R. Lamm and G.A. Clark, Lubbock, Texas, March 12-14, 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 **SDI in the Great Plains** at Central Plains Irrigation Conference, February 27-28, 2007, Kearney, Nebraska.

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 **Optimum Fertigation for Corn Using SDI** 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.

Distribution of SDI and the Great Plains CD-Rom, February 2007.

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.

Tour of SDI facilities for KSU administrators, Forrest Chumley, Doug Elcock and Bob Gillen, August 23, 2006.

Demonstration to U. S. Congressional Aides of COpt_SD1.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 **SDI in the Great Plains** at 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.

Poster presentation of **Optimum Fertigation for Corn Using SDI** 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 Sedgewick County SDI Field Day, Wichita, Kansas, June 1, 2005.

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

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

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

Poster presentation of **Nutrient Management with SDI** at KSU Sedgewick 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.

Ogallala Aquifer Project written report, **Effects of pre- and post-anthesis stress and N placement on corn**, February, 2005.

Ogallala Aquifer Project written report, **Effect of dripline depth on corn and sunflower**, February 2005.

Ogallala Aquifer Project written report, **Installation effects on SDI flowrates and uniformity**, February, 2005.

Ogallala Aquifer Project written report, **Comparison of LEPA and SDI**, Feb. 2005.

Ogallala Aquifer Project written report, **SDI and CP sprinkler economics**, February, 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.

Discussion of SDI research with US Congressional Aides, August 12, 2004.

SDI Technology Field Day, at NWREC with 139 participants, Aug. 10, 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 **What is SDI?** 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 **Livestock wastewater utilization 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.

Participant and Resource Person in Western Irrigation Operation and Maintenance Workshop, Feb 24, 2004, Garden City, Kansas.

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 Ogallala Symposium, Wray, Colorado, Feb. 23, 2004.

CD of SDI website distributed to participants of Ogallala Symposium, Wray, Colorado, Feb. 23, 2004.

Poster presentation of **SDI in the Great Plains** at Ogallala Symposium, Wray, Colorado, Feb. 23, 2004.

Poster presentation of **Using livestock wastewater with SDI** at Ogallala Symposium, Wray, Colorado, Feb. 23, 2004.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at Ogallala Symposium, Wray, Colorado, Feb. 23, 2004.

CD of SDI website distributed to participants Central Plains Irrigation Conference, Kearney, Nebraska, Feb. 17-18, 2004.

Poster presentation of **SDI in the Great Plains** at Central Plains Irrigation Conference, Kearney, Nebraska, Feb. 17-18, 2004.

Poster presentation of **Using livestock wastewater with SDI** at Central Plains Irrigation Conference, Kearney, Nebraska, Feb. 17-18, 2004.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at Central Plains Irrigation Conference, Kearney, Nebraska, Feb. 17-18, 2004.

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 **SDI in the Great Plains** at 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, WY, 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, KS, Jan. 22, 2004.

Presentation of **Design and management considerations for SDI** at SDI meeting, Dodge City, Kansas, December 10, 2003.

Presentation of **SDI Research for Corn Production in Kansas, 14 Years of Progress** at SDI meeting, Dodge City, Kansas, December 10, 2003.

Presentation of **Using beef lagoon wastewater with SDI** at SDI meeting, Dodge City, Kansas, December 10, 2003.

Presentation of **Center pivot sprinkler and SDI economic comparisons** at SDI meeting, Dodge City, Kansas, December 10, 2003.

Poster presentation of **SDI in the Great Plains** at SDI meeting, Dodge City, Kansas, December 10, 2003.

Poster presentation of **Using livestock wastewater with SDI** at SDI meeting, Dodge City, Kansas, December 10, 2003.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at SDI meeting, Dodge City, Kansas, December 10, 2003.

Presentation of **Design and management considerations for SDI** at SDI meeting, Abilene, Kansas, December 9, 2003.

Presentation of **SDI Research for corn production in Kansas, 14 years of progress** at SDI meeting, Abilene, Kansas, December 9, 2003.

Presentation of **Using beef lagoon wastewater with SDI** at SDI meeting, Abilene, Kansas, December 9, 2003.

Presentation of **Center pivot sprinkler and SDI economic comparisons** at SDI meeting, Abilene, Kansas, December 9, 2003.

Poster presentation of **SDI in the Great Plains** at SDI meeting, Abilene, Kansas, December 9, 2003.

Poster presentation of **Using livestock wastewater with SDI** at SDI meeting, Abilene, Kansas, December 9, 2003.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at SDI meeting, Abilene, Kansas, December 9, 2003.

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

Newspaper article in Salina Journal, Oct. 5, 2003 entitled, Drip, Drip, Drip.

Presentation of **SDI in the Great Plains region with a few glances elsewhere** 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.

Presentation of **A look at SDI in the Great Plains region with a few glances elsewhere**, Tri-State Economic Development meeting, May 15, 2003.

Presentation of **Nitrogen fertilization for corn production using SDI** at Water and the Future of Kansas Conference, Manhattan, KS, Ma. 11, 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.

Coordinator of SDI producer panel for Central Plains Irrigation Conference, Colby, KS, Feb 4-5, 2003.

Poster presentation of **SDI in the Great Plains** at Central Plains Irrigation Conference, Colby, KS, Feb 4-5, 2003.

Poster presentation of **Using livestock wastewater with SDI** at Central Plains Irrigation Conference, Colby, KS, Feb 4-5, 2003.

Poster presentation of **Nitrogen fertilization for corn production using SDI** at Central Plains Irrigation Conference, Colby, KS, Feb 4-5, 2003.

Research application summary (Economically optimal corn plant population at various capacities using SDI) and Excel spreadsheet (Copt_SD1.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.

Computer presentation of **Economic comparison of SDI & center pivot sprinklers for corn: Sensitivity to key factors** 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.

Lamm, F.R. 2002. **SDI for corn production in Kansas**. USDA-RRF W-128 Microirrigation Committee, New Orleans, LA, October 24, 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 in-service for UNL and NRCS personnel, Hastings, NE, 3-20-02.

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 **SDI Research for corn production for SDI** at SDI in-service for UNL and NRCS personnel, Hastings, NE, 3-20-02.

Presentation of **Economic comparison of SDI & center pivot sprinklers for corn: Sensitivity to key factors** at SDI in-service for UNL and NRCS personnel, Hastings, NE, 3-20-02.

Development and posting to SDI website of Excel template to compare economics of SDI and center pivot sprinklers, 3-19-02.

Presentation of **Minimum requirements for SDI systems** at County agent update at KSU-SWREC, March 7, 2002.

Presentation of **Economic comparison of SDI & center pivot sprinklers for corn: Sensitivity to key factors** at county agent update at KSU-SWREC, March 7, 2002.

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

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

Poster presentation of **SDI and the Great Plains** 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.

Computer presentation of **Economic comparison of SDI & center pivot sprinklers for corn: Sensitivity to key factors** at SDI meeting in Hugoton, Kansas, Feb 20, 2002.

Presentation of **Design and management considerations for SDI** 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.

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

Computer presentation of **Economic comparison of SDI & center pivot sprinklers for corn: Sensitivity to key factors** at SDI meeting in Garden City, Kansas, Feb 19, 2002.

Presentation 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.

Computer presentation of **Economic comparison of SDI & center pivot sprinklers for corn: Sensitivity to key factors** 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.

Presentation of **Design and management considerations for SDI** at the Michiana Irrigation Association Annual Meeting, Shipshewana, IN, Dec.10, 2001.

Presentation of **Potential issues for Michiana seed corn producers considering SDI** at the Michiana Irrigation Association Annual Meeting, Shipshewana, IN, Dec.10, 2001.

Lamm, F.R. 2001. **SDI for corn production in Kansas**. USDA-RRF W-128 Microirrigation Committee, San Antonio, Texas, Nov.6-8, 2001.

Discussion of progress of livestock wastewater utilization with SDI with K-State administrators, Sept. 28, 2001.

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 scientists with "Tear down the Walls" symposium, August 13, 2001. Approximately 6 in attendance.

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

SDI technology Field Day, August 7, 2001. Approximately 200 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.

Poster presentation of **Comparison of SDI and simulated LEPA sprinkler irrigation for corn**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **Filtration for SDI systems**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **Livestock wastewater utilization with SDI**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **The Ogallala and the potential for SDI**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **K-State's permanent bed system for SDI**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **SDI, pros and cons**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **Slope considerations for SDI**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **Spacing of driplines for corn production**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **Using SDI and LEPA sprinkler irrigation to apply swine wastewater -- A Progress Report**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **Minimal system requirements for SDI**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **Optimal plant populations for corn using SDI with limited well capacities**, SDI Technology Field Day, August 7, 2001.

Poster presentation of **Water use of corn**, SDI Technology Field Day, August 7, 2001.

Newspaper article in Salina Journal, August 5, 2001.

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

Tour of SDI facilities and discussion of research with Tom Doerge, Pioneer Hi-bred Int., July 25, 2001.

Mini-tour of SDI facilities for Ogallala Technical Taskforce, July 9, 2001. Approximately 20 in attendance.

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

Field tour of SDI facilities for KU Whirlwind Wheat State Tour, May 24, 2001.

Radio interview about SDI by Bruce Gaarder, Clear Channel Ag Network, Oklahoma City, OK, Feb. 23, 2001.

Participant in "*Drip Management and Maintenance Meeting*" sponsored by Western Irrigation, Garden City, KS, Feb. 21, 2001.

Participant in "*SDI in the Humid Regions*" publication planning workshop, Florence, SC, Feb 13-15, 2001.

News release by K-State Research and Extension (Pat Melgares) concerning use of livestock wastewater with SDI carried in numerous newspapers. Feb. 2001.

Oral presentation of design and management considerations for SDI at SDI workshop, Alma, NE, Jan. 31, 2001.

Lamm, F.R., A.J. Schlegel, and G.A. Clark. 2001. Poster presentation of *Optimum nitrogen fertigation of corn with SDI*. SDI workshop, Alma, NE, Jan. 31, 2001.

Lamm, F.R. and T.P. Trooien. 2001. Poster presentation of *SDI in the Great Plains*. SDI workshop, Alma, NE, Jan. 31, 2001.

Lamm, F.R., Trooien, T.P., L.R. Stone, M. Alam, D.H. Rogers, G.A. Clark, and A.J. Schlegel. 2001. **Using livestock wastewater with SDI -- A status report after three seasons**. A presentation to the FACT conference, Liberal, KS, Jan. 9, 2001.

Lamm, F.R. 2000. Presentation of **Design and management considerations for SDI systems** at Crop Modeling Workshop, Univ. of Nebraska, Lincoln, NE, Dec. 4-7, 2000.

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.

Newsletter article **Using livestock wastewater with SDI**, CPIA Waterline, 4(1)2-3. Nov. 2000.

Poster presentation of **SDI in the Great Plains** at Division of Water Resource training, Rossville, KS, Oct. 11, 2000. Presentation by D. Rogers.

Poster presentation of **Economics of SDI for corn production** at the Division of Water Resource training, Rossville, KS, Oct. 11, 2000. Presentation by D. Rogers.

K-State county agent update on SDI for corn production, Colby, KS, Oct. 4, 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.

Lamm, F.R. 2000. **SDI for corn production in Kansas**. USDA-RRF W-128 Microirrigation Committee, Maui, Hawaii, Sep. 19-22, 2000.

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

Poster presentation of **SDI in the Great Plains** at the KSU-Agronomy Field Day, Manhattan, KS, Sep. 7, 2000. Presentation by D. Rogers.

Poster presentation of **Economics of SDI for corn production** at the KSU- Agronomy Field Day, Manhattan, KS, Sep. 7, 2000. Presentation by D. Rogers.

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

Field day presentation of **Using livestock wastewater with SDI**, KSU-SWREC, Garden City, KS, Aug. 24, 2000.

Poster presentation of **SDI in the Great Plains** at the KSU-SWREC Field Day, Garden City, KS, Aug. 24, 2000.

Poster presentation of **Economics of SDI for corn production** at the KSU-SWREC Field Day, Garden City, KS, Aug. 24, 2000.

Poster presentation of **Nitrogen fertigation of corn with SDI** at the KSU-SWREC Field Day, Garden City, KS, Aug. 24, 2000.

Poster presentation of **SDI in the Great Plains** at the KSU-NWREC Field Day, Colby, KS, Aug. 23, 2000.

Poster presentation of **Economics of SDI for corn production** at the KSU-NWREC Field Day, Colby, KS, Aug. 23, 2000.

Poster presentation of **Nitrogen fertigation of corn with SDI** at the KSU-NWREC Field Day, Colby, KS, Aug. 23, 2000.

Legislative briefing on USDA Special Project, **Water conservation - Increased efficiency in usage**, Manhattan, KS, Aug. 22, 2000.

Poster presentation of **SDI in the Great Plains** at the KSU-Kansas River Valley Field Day, Topeka, KS, Aug. 9, 2000. Presentation by D. Rogers.

Poster presentation of **Economics of SDI for corn production** at the KSU- Kansas River Valley Field Day, Topeka, KS, Aug. 9, 2000. Presentation by D. Rogers.

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

Tour of NWREC SDI facilities and discussion of SDI with Ken Phillips, Yardney Filtration, May. 19, 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.

Lamm, F.R. and T.P. Trooien. 2000. **SDI for corn production and waste management**. Presentation to Conservation District, Ellsworth, KS, Mar. 16, 2000.

Lamm, F.R. and T.P. Trooien. 2000. **SDI for corn production and waste management**. Presentation to Conservation District, Grainfield, KS, Mar. 14, 2000.

Trooien, T.P., F.R. Lamm, L.R. Stone, M. Alam, D.H. Rogers, G.A. Clark, and A.J. Schlegel. 2000. Poster presentation of **Using lagoon wastewater with subsurface drip irrigation** presented at the 17th annual Water and the Future of Kansas Conf., Manhattan, KS, March 1, 2000.

Lamm, F.R. and T.P. Trooien. 2000. Poster presentation of **SDI in the Great Plains**. Central Plains Irrigation Short Course, Garden City, KS, Feb. 9-10, 2000.

O'Brien, D.M. and F.R. Lamm. 2000. Poster presentation of **Economics of SDI for corn**. Central Plains Irrigation Short Course, Garden City, KS, Feb. 9-10, 2000.

Lamm, F.R. and T.P. Trooien. 2000. Poster presentation of **Using livestock wastewater with SDI**. Central Plains Irrigation Short Course, Garden City, KS, Feb. 9-10, 2000.

Lamm, F.R., A.J. Schlegel, and G A. Clark. 2000. Poster presentation of **Optimum nitrogen fertigation of corn with SDI**. Central Plains Irrigation Short Course, Garden City, KS, Feb. 9-10, 2000.

Lamm, F.R. 2000. **Design and management considerations for subsurface drip irrigation systems** at county meeting, Sublette, KS, Jan. 26, 2000.

Lamm, F.R. 2000. **SDI research for corn production** at county meeting, Sublette, KS, Jan. 26, 2000.

Poster presentation of **Economics of SDI for corn production** at county meeting, Sublette, KS, Jan. 26, 2000.

Poster presentation of **Nitrogen fertigation of corn with SDI** at county meeting, Sublette, KS, Jan. 26, 2000.

Poster presentation of **SDI in the Great Plains** at county meeting, Sublette, KS, Jan. 26, 2000.

Lamm, F.R. 2000. Executive summary to Congressmen, Jerry Moran and Jim Ryan of USDA Special Grant **Water conservation -- Increased efficiency in usage**. Jan. 24, 2000, Manhattan, KS.

Lamm, F.R. 2000. **Design and management considerations for subsurface drip irrigation systems** at county meeting, Pratt, KS, Jan. 20, 2000.

Lamm, F.R. 2000. **SDI research for corn production** at county meeting, Pratt, KS, Jan. 20, 2000.

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

Poster presentation of **Nitrogen fertigation of corn with SDI** at county meeting, Pratt, KS, Jan. 20, 2000.

Poster presentation of **SDI in the Great Plains** at county meeting, Pratt, KS, Jan. 20, 2000.

Lamm, F.R. 2000. **SDI research for corn production** at county meeting, Colby, KS, Jan. 19, 2000.

Lamm, F.R. 2000. **Design and management considerations for subsurface drip irrigation systems** at county meeting, Colby, KS, Jan. 19, 2000.

Poster presentation of **Economics of SDI for corn production** at county meeting, Colby, KS, Jan. 19, 2000.

Poster presentation of **Nitrogen fertigation of corn with SDI** at county meeting, Colby, KS, Jan. 19, 2000.

Poster presentation of **SDI in the Great Plains** at county meeting, Colby, KS, Jan. 19, 2000.

Tour of NWREC SDI facilities for Toro-Ag representatives (2), Dec. 1, 1999.

Lamm, F.R. 1999. Presentation of **SDI in the Great Plains and its potential impact**. Colby Kiwanis group, Colby, KS, Nov. 4, 1999.

Lamm, F.R. and T.P. Trooien. 1999. Presentation of **SDI research for corn production**. NRCS Irrigation Information Day, Long Island, KS, Nov. 3, 1999.

Lamm, F.R. and T.P. Trooien. 1999. Poster presentation of **SDI in the Great Plains**, NRCS Irrigation Information Day, Long Island, KS, Nov. 3, 1999.

O'Brien, D.M. and F.R. Lamm. 1999. Poster presentation of **Economics of SDI for corn**. NRCS Irrigation Information Day, Long Island, KS, Nov. 3, 1999.

Lamm, F.R. 1999. **SDI for corn production in Kansas**. USDA-RRF W-128 Microirrigation Committee, Boise, ID, Oct. 28-30, 1999.

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

Newspaper in Hastings, NE (Barb Batie). Topic: SDI, Oct. 1999.

KRVN Radio, Lexington, NE (Mike LaForce). Topic: SDI. Sept. 9, 1999.

Associated Press (Cheryl Wittenhauer). Topic: SDI. Sept. 1999.

Lamm, F.R. 1999. Tour and Discussion of **SDI and livestock wastewater research**. Midwest Feeders, Ingalls, KS, Aug. 26, 1999.

Lamm, F.R. 1999. Participant and made comments at SDI Field Day for Garden City Company, Holcomb, KS, Aug. 26, 1999.

US Congress Legislative Aides Tour, 20 in attendance, Midwest Feeders, Ingalls, KS, Aug. 17, 1999.

SDI & Wastewater Field Day, 15 people, Midwest Feeders, Aug. 26, 1999.

SDI Technology Field Day, NWREC, 140 in attendance, Aug. 12, 1999.

Lamm, F.R. 1999. Discussion of **KSU research with corn production**, SDI Technology Field Day, Colby, KS, Aug. 12, 1999.

Lamm, F.R. and T.P. Trooien. 1999. Poster presentation of **SDI in the Great Plains**, SDI Technology Field Day, Colby, KS, Aug. 12, 1999.

O'Brien, D.M. and F.R. Lamm. 1999. Poster presentation of **Economics of SDI for corn**, SDI Technology Field Day, Colby, KS, Aug. 12, 1999.

Oklahoma radio station network. Topic: SDI. Aug. 1999.

K-Farm Radio, Salina, KS (Jerry McClann). Topic: SDI. July 1999.

K-State News Services (Pat Melgares). Topic: SDI. July 1999.

Lamm, F.R. 1999. **SDI for corn production in Kansas**. Israeli Volcani Institute, Bet Dagan, Israel, March 22, 1999.

Lamm, F.R. 1999. Poster presentation of **SDI in the Great Plains**. Great Plains Symposium, Oklahoma City, OK, March 10-12, 1999.

Presentation of **Testing subsurface drip Irrigation laterals with lagoon wastewater** at the 16th annual Water and the Future of Kansas Conf., Manhattan, KS, March 2, 1999. Presentation by Todd Trooien.

Lamm, F.R. and T.P. Trooien. 1999. Poster presentation of **SDI in the Great Plains** presented at the 16th annual Water and the Future of Kansas Conference, Manhattan, KS, March 2, 1999.

Lamm, F.R. and T.P. Trooien. 1999. Poster presentation of **SDI in the Great Plains**, Central Plains Irrigation Short Course, Sterling, CO, Feb. 9-10, 1999.

O'Brien, D.M. and F.R. Lamm. 1999. Poster presentation of **Economics of SDI for corn**, Central Plains Irrigation Short Course, Sterling, CO, Feb. 9-10, 1999.

Lamm, F.R. 1999. **Design and management considerations for subsurface drip irrigation systems** at county meeting, Hugoton, KS, Jan. 29, 1999.

Lamm, F.R. 1999. **Design and management considerations for subsurface drip irrigation systems** at county meeting, Scott City, KS, Jan. 28, 1999.

Lamm, F.R. 1999. **SDI research for corn production** at county meeting, Hugoton, KS, Jan. 29, 1999.

Lamm, F.R. 1999. **SDI research for corn production** at county meeting, Scott City, KS, Jan. 28, 1999.

Lamm, F.R. 1999. Impromptu presentation of **SDI for corn production**, Gigot Customer Appreciation Day, Garden City, KS, Jan. 12, 1999.

Lamm, F.R. and T.P. Trooien. 1999. Poster presentation of **SDI and livestock wastewater**, Gigot Customer Appreciation Day, Garden City, KS, Jan. 12, 1999.

O'Brien, D.M. and F.R. Lamm. 1999. Poster presentation of **Economics of SDI for corn**, Gigot Customer Appreciation Day, Garden City, KS, Jan. 12, 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 preliminary results of **Livestock wastewater utilization with SDI: A pilot project**, at International Irrigation Association Conference, San Diego, CA, Nov. 1-3, 1998. Presentation by Todd Trooien.

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.

Radio interview by Eric Atchison, KKSU, August 1998.

Videotaped by Joe Camorino, KSU for KAES-CES Annual Conference, Oct. 1998.

Poster presentation of **Livestock wastewater utilization with SDI: A pilot project**, at K-State Research and Extension Annual Conf., Oct. 1998.

Briefing for Kansas NRCS staff on SDI, Manhattan, KS, Sept. 22, 1998.

Discussion of SDI and field tour of NWREC SDI research site for Nelson Irrigation, Sept. 21, 1998.

Coordinated and planned field day for presentation of **Livestock wastewater utilization with SDI: A pilot project**, at Ingalls, KS, Aug. 27, 1998.

Prepared poster for presentation of **Livestock wastewater utilization with SDI: A pilot project**, at SWREC field day, Garden City, KS, Aug. 27, 1998.

Invited speaker for written presentation of **Livestock wastewater utilization with SDI: A pilot project**, at the Kansas Pork Producers Council Environmental Field Day, Redding, KS, Aug. 19, 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.

Tour of SDI wastewater site, Ingalls, KS 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 **Corn production using SDI** at NW Kansas Groundwater Management Seminar, Colby, KS, March 26, 1998.

Presentation of **SDI and the declining Ogallala** at the 15th annual Water and the Future of Kansas Conference, Manhattan, KS, March 3, 1998. Proceedings Pages, 12-15.

Poster entitled **Economics of SDI for corn** presented at the 15th annual Water and the Future of Kansas Conference, Manhattan, KS, Mar. 3, 1998.

Presentation of **Corn production using SDI** at KSU Dept. of Agronomy Seminar, Manhattan, KS, Feb. 25, 1998.

Poster entitled **Economics of SDI for corn** presented at the Central Plains Irrigation Short Course, North Platte, NE, Feb. 17-18, 1998.

Poster entitled **N fertigation and SDI: A BMP** presented at the Central Plains Irrigation Short Course, North Platte, NE, Feb. 17-18, 1998.

Initiation of K-State website entitled **SDI and the Great Plains** at <http://www.oznet.ksu.edu/sdi> on Feb. 9, 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 **Corn production using SDI** at the Kansas Fertilizer and Agricultural Chemical Conference, Salina, KS, Jan. 15, 1998.

Presentation of **Optimum fertigation of corn using SDI** at the Kansas Fertilizer and Agricultural Chemical Conference, Salina, KS, Jan. 15, 1998.

Poster entitled **Economics of SDI for corn** presented at the Gigot Irrigation Customer Appreciation Day, Garden City, KS, Jan. 7, 1998.

Poster entitled **N fertigation and SDI: A BMP** presented at the Gigot Irrigation Customer Appreciation Day, Garden City, KS, Jan. 7, 1998.

Poster entitled **N fertigation and SDI: A BMP** presented at the 1997 KAES-CES Annual Conference, Nov. 3-7, 1997.

Poster entitled **Economics of SDI for corn** presented at the 1997 KAES-CES Annual Conference, Nov. 3-7, 1997.

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

Several contacts and visits from microirrigation manufacturers and distributors in Sept.-Oct. 1997, apparently in response to growing interest in SDI in southwest Kansas.

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 uses of corn for Colby kindergarten class, Oct. 2, 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.

Presentation of **Optimum dripline spacing for corn** at the 12th Water and the Future of Kansas Conf., Manhattan, KS, Feb. 28-Mar. 1, 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 Kansas water agencies, Aug. 1994.

Guided tour of subsurface drip irrigation facilities and discussion of research for the Kansas Department of Environment, Aug. 1994.

Presentation of drip irrigated corn studies at the 11th Annual Water and the Future of Kansas Conference, Manhattan, KS, March 2-3, 1994.

Presentation of **KSU's SDI research on corn** to the Western Regional RRF Project W-128, Oct. 28-30, 1993, San Diego, CA.

Presentation of drip irrigation research at the 1993 KSU NWREC Fall Field Day, Aug. 25, 1993.

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.

Poster entitled **Drip irrigation for corn production--the research approach in western Kansas** at the 9th Annual Water and the Future of Kansas Conference, Manhattan, KS, March 4-5, 1992.

Poster entitled **Drip irrigation for corn production--the research approach in western Kansas** at the Central Plains Irrigation Short Course, Goodland, KS, Feb. 1992.

Co-coordinator and presenter at technical session entitled **Drip irrigation for corn production** at the Central Plains Irrigation Short Course, Goodland, KS, Feb. 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 7th Annual Water and the Future of Kansas Conference, Manhattan, KS, March 1990.

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.

Miscellaneous producer contacts and newspaper articles, 1989-2008.