

Kenneth E. Spaeth Jr.

Recent publications

Spaeth, K.E., F.B. Pierson, J.E. Herrick, P. Shaver, D.A Pyke, M. Pellant, D. Thompson, and R. Dayton. 2003. New proposed National Resources Inventory protocols on nonfederal rangelands. *J. Soil and Water Conservation*. January-February. Vol 58:18-21.

Spaeth, K.E., F.B. Pierson, and P.R. Robichaud. 2003. Hydrology—Erosion—Plant—Soil Interrelationships after Rangeland Wildfire. *Post Fire Ecology & Mgmt. II*. 56th Annual Meeting Society for Range Management Casper, Wyoming, Society for Range Management, Denver, Colorado.

Moffet, C., F.B. Pierson, K.E. Spaeth, and D.H. Carlson. 2003. Integration of the SPUR and WEPP models for improved runoff and erosion estimates on rangeland. Poster presentation. 56th Annual Meeting Society for Range Management Casper, Wyoming, Society for Range Management, Denver, Colorado.

Spaeth, K.E., F.B. Pierson, M.A. Weltz, and W.H. Blackburn. 2003. Evaluation of USLE and RUSLE estimated soil loss on rangeland. *J. Range Management*. Accepted for May

Spaeth, K.E. 2002. Atmospheric gas exchange and carbon budgets in grazingland plant communities. Technical Note. USDA-NRCS, Grazinglands Institute, Ft. Worth, Texas.

Pierson, F.B., K.E. Spaeth, M.E. Weltz., and D.H. Carlson. 2002. Hydrologic response of diverse western rangelands. *J. Range Management* 55:558-570.

Spaeth, K.E. 2002. New proposed NRI protocols for NRCS. Society for Range Management 55th Annual Meeting, Society for Range Management, Kansas City, Missouri. Rangeland Assessment and Monitoring Committee. Society for Range Management, Denver, Colorado.

Pierson, F.B., D.H. Carlson, and K.E. Spaeth. 2002. Impacts of wildfire on soil hydrologic properties of steep sagebrush-steppe rangeland. *International Journal of Wildland Fire* 11:145-151.

Spaeth, K.E., F.B. Pierson, M.A. Weltz. 2002. Grazingland Hydrology, Chapter 7. Updated National Range and Pasture Handbook 190-VI. USDA-NRCS Grazinglands Technology Institute. Washington, D.C.

Pierson, F.B., P.R. Robichaud, and K.E. Spaeth. 2001. Spatial and temporal effects of wildfire on the hydrology of a steep rangeland watershed. *Hydrological Processes* 15:2905-2916.

Pierson, F.B., D.H. Carlson, and K.E. Spaeth. 2001. A process-based hydrology

submodel dynamically linked to the plant component of the simulation of production and utilization on rangelands SPUR model. *Ecological Modelling* 141:241-260.

Pierson, F.B., P.R. Robichaud, and K.E. Spaeth. 2001. Spatial and temporal effects of wildfire on the hydrology of a steep rangeland watershed. *Hydrologic processes* 15:2905-2916.

Pierson, F.B., D.H. Carlson, K.E. Spaeth 2001. Fire effects on sediment and runoff in steep rangeland watersheds. In *Proceedings of the Seventh Federal Interagency Sedimentation Conference*. p. X-33 - X-40. Reno, Nevada

Spaeth, K.E., F.B. Pierson, and D. Carlson. 2001. WEB-Based Demonstration of SPUR 2000. 54th Annual Meeting, Society for Range Management, Kona, Hawaii.

Spaeth, K.E., F.B. Pierson, and D. Carlson. 2001. Poster paper: Display case NHQ--NRCS Chief's office. SPUR-2000: Web Based Decision-making for Rangelands. Prototype Demonstration of a Rangeland Hydrology and Erosion Model. Feb-March 2001.

Spaeth, K.E., F.B. Pierson, and D. Carlson. 2001. Presented Poster WEB-Based Demonstration of SPUR-2000 for Ecological Site Description Applications. Third International Conf. on Geospatial Information in Agric. and Forestry, Denver, Colorado 11/5 - 11/7/2001.

Spaeth, K.E., F.B. Pierson, and D. Carlson. 2001. Presented Poster WEB-Based Demonstration of SPUR-2000. ARS/NRCS Hydrology and Erosion Workshop, Tucson, Arizona 11/26-11/29/2001.

Spaeth, K.E., F.B. Pierson, D. Carlson, and D. Thompson. 2000. Successful "cutting edge" management technologies for grazing practices. SPUR-2000: Decision Support System for Evaluating and Managing Rangelands. Poster paper: Dec. 5-8, 2000 National Conf. on Grazing Lands.

Spaeth, K.E., M. Pellant, P. Shaver, and F.B. Pierson. 1999. Natural Resource Inventory on BLM lands in Colorado: An analysis of Rangeland Health. VI International Rangeland Congress. Townsville, Australia, July 18-23, 1999.

Shaver, P., K. Spaeth, M. Pellant, and A. Mendenhall. 1999. National and regional level rangeland assessment. VI International Rangeland Congress. Townsville, Australia, July 18-23, 1999.

Pierson, F.B., K.E. Spaeth, and D.H. Carlson. 1999. SPUR-2000: decision support system for assessing and managing rangelands. VI International Rangeland Congress. Townsville, Australia, July 18-23, 1999.

Spaeth, K.E. 1999. A Report on the Analysis and Evaluation of the 1997 Colorado NRI Data. October 18-21, 1999. Washington, D.C.

Pellant, M., P. Shaver, and K. Spaeth. 1999. Field test of a prototype rangeland inventory procedure in the western USA. VI International Rangeland Congress. Townsville, July 18-23, 1999.

Franks, C.D., F.B. Pierson, A.G. Mendenhall, K.E. Spaeth, and M.A. Weltz. 1998. Interagency Rangeland Water Erosion Project Report and State Data Summaries. USDA-ARS/NRCS Technical Note: NWRC 98-1, August 1998. Boise, Idaho.

Pierson, F.B., K.E. Spaeth, D.H. Carlson, and K.R. Stine. 1998. SPUR 2000: Interagency Approach to Quantify the Benefits of NRCS Technical Assistance. Nebraska Demonstration Project. USDA-ARS/NRCS Technical Note: NWRC 98-4. Boise, Idaho.

Spaeth, K.E. 1998. p. 43-50. In: Zachman, D. (ed.). Natural Resources Inventory (NRI) Colorado Pilot Test 1997-1998. BLM TR. 5-98. USDI-BLM, Denver, Colorado.

Spaeth, K.E., F.B. Pierson, L.J. Rich, Fee Busby, P.L. Shaver., and A.G. Mendenhall. 1998. State of the Nation's non-Federal Rangeland: 1992 National Resource Inventory Summary: Nation, Regions, and States. USDA-NRCS Tech. Publ., Grazingland Institute, Ft. Worth, Texas.

Spaeth, K.E., F.B. Pierson, L.J. Rich, Fee Busby, P.L. Shaver., and A.G. Mendenhall. 1998. State of the Nation's non-Federal Rangeland: 1992 National Resource Inventory Summary: Major Land Resource Areas USDA-NRCS Tech. Publ. Grazingland Institute, Ft. Worth, Texas.

Spaeth, K.E., Thurow, R.L., Blackburn, W.H., and F.B. Pierson. 1996. Ecological dynamics and management effects on rangeland hydrologic processes. In: Spaeth, K.E., F.B. Pierson, M.A. Weltz, and G. Hendricks. 1996 (eds.). Rangeland hydrology issues: perspectives for the 21st century. Society for Range Management, Denver Colorado.

Spaeth, K.E., F.B. Pierson, M.A. Weltz, and J.B. Awang. 1996. Gradient analysis of infiltration and environmental variables related to rangeland vegetation. Transactions of the ASAE 39(1): 67-77.

Spaeth, K.E., M.K. Weltz, F.B. Pierson, W.H. Blackburn, and H.D. Fox. 1995. Small plot rainfall simulation: Background and Procedures. USDA-Natural Resources Conservation Service, Washington, D.C. National Technical Bulletin. No. 230-15-12.

Spaeth, K.E., M.A. Weltz, F.B. Pierson, and H.D. Fox. 1994. Spatial pattern analysis of sagebrush vegetation and potential influences on hydrology and erosion. Symposium Proceedings: Variability in rangeland water erosion processes. New Visions, New Perspectives, 84th Annual Meeting, Soil Science Society of America, November 1-6, 1992, Minneapolis, Minnesota. SSSA Special Publication 38.

Spaeth, K.E., F.B. Pierson, R. Voss, D. Schmidt, and W. Vander Vorste. 1994. Hydrologic

assessments within the Bad River watershed of South Dakota. USDA-Soil Conservation Service, Midwest National Technical Center, Lincoln NE. Technical Note 190-LI-4.

Spaeth, K., D. Vik, F. Pierson, W. Vander Vorste, and D. Schmidt. 1994. Erosion prediction in the Bad River Basin, South Dakota, using SPUR-91. USDA-Soil Conservation Service, Midwest National Technical Center, Lincoln NE. Technical Note 190-LI-5.

Spaeth, K.E., F.B Pierson, and L.W. Jolley. 1994. Rangeland hydrologic assessments at three locations in California: Upper Stoney Watershed, Sierra Field Station, and Stemple Creek. USDA-Soil Conservation Service, Midwest National Technical Center, Lincoln NE. Technical Note 190-LI-6.

RECENT PRESENTATIONS

Spaeth, K.E., and F.B. Pierson. 2003. SPUR-WEPP technology for pastureland. USDA-Pasture Systems and Watershed Management Research Unit. Seminar Jan. 13-17, 2003. State College, Pennsylvania.

Spaeth, K.E., and F.B. Pierson. 2002. Hydrologic Information Considerations in NRCS Ecological Site Descriptions, and Status of WEPP/SPUR on rangelands. NRCS California Range Specialist Training Workshop February 28-March 1, 2002, Davis, Calif.

Spaeth, K.E. 2002. NRCS Ecological sites. Owyhee County Rangeland Working Group, March 4, 2002. Marsing, Idaho.

Spaeth, K.E., and F.B. Pierson. 2002. Rangeland Health and Hydrologic Information Considerations for NRCS Ecological Site Descriptions. NRCS Idaho Ecological Site Workshop March 20-21, 2002, Boise, Idaho.

Spaeth, K.E., F.B. Pierson. 2001. Update on Rangeland Hydrology and Erosion Models. NRCS Ecological Site Description Development Workshop 12/5/01. NRCS Boise State.

Spaeth, K.E., F.B. Pierson, and D. Carlson. 2001. I. Cooperative Wildfire Effects on Hydrology and Erosion research on rangeland and forestland. II. WEB-Based Demonstration of SPUR-2000. ARS/NRCS Partnering Management Team (PMT) meeting, Beltsville Maryland 12/11-12/12/2001.

Spaeth, K.E. 2001. Pilot tests on new rangeland protocols for NRI. Review of 1992 NRCS-NRI on rangeland. NRCS NRI Executive Committee Meeting, Beltsville Maryland 12/11/2002.

Spaeth, K.E., and F.B. Pierson. 1999. Rangeland Hydrology. USDA-NRCS Symposium: Building on our heritage with technology for today and tomorrow. Introducing the NRCS-National Range and Pasture Handbook. 52nd meeting of the Society for Range Management, February 21-26, 1999, Omaha, Nebraska.

Spaeth, K.E., and F.B. Pierson. 1999. Summary of Rangeland Health from the 1997 BLM Rangeland Resource Inventory. 52nd meeting of the Society for Range Management, February 21-26, 1999. Omaha, Nebraska.

Spaeth, K.E., and F.B. Pierson 1999. Grazingland Hydrology. A review of the National Range and Pasture Handbook. Nevada Society for Range Management Section Meeting, January 14-16th, 1999, Fallon, Nevada.

Spaeth, K.E. and F.B. Pierson. 1999. Status Report on SPUR/WEPP model. National Ecological Sciences Division and Grazingland Institute. USDA-NRCS Grazinglands Institute Business Meeting, January 4-8th, 1999, Ft. Worth, Texas.

Spaeth, K.E. 1999. Presentation on the status and analysis of the BLM, 1997 Pilot NRI data. October 18-21st, 1999. NRCS National Headquarters, Washington, D.C.

Spaeth, K.E. 1999. Correlations of Rangeland Health with field data. Inventory and Assessment team technical review. Boise, Idaho. January 1999.

Spaeth, K.E. 1998. Report on the State of Grazinglands: 1992 National Resource Inventory Analysis. Grazinglands Conservation Initiative Conference. USDA-NRCS National Headquarters, September 23-25th, 1998, Washington, D.C.

Spaeth, K.E. 1998. Status report on the Natural Resources Inventory (NRI) Colorado Pilot Test 1997 and the SPUR-2000 rangeland hydrology and erosion model. USDA-NRCS Grazingland Institute Business Mtg. August 17-19th, 1998., Ft. Worth, Texas.

Spaeth, K.E. 1998. Summary of analysis of BLM 1997 Colorado Pilot Resource Inventory on MLRA-34. August 4-5th, Colorado BLM State Office, Denver Colorado.

Spaeth, K.E. 1998. Summary of analysis of BLM 1997 Colorado Pilot Resource Inventory. A test of the Rangeland Health Model. USDI-BLM Resource Inventory Training and Assessment Meeting., April 1998, Junction City, Colorado.

Pierson, F.B., K.E. Spaeth, and D.H. Carlson. 1998. SPUR 2000: Interagency Approach to Quantify the Benefits of NRCS Technical Assistance, Nebraska Demonstration Project, FY-1998 Report. USDA-NRCS Nebraska State Office, November 9-10th, 1998.

Spaeth, K.E., and Pierson, F.B. 1998. Plant diversity changes in grazed Southwest Idaho rangeland community types. VII International Congress of Ecology. Invited Symposium presentation, July 1998, Florence, Italy.

Spaeth, K.E., and F.B. Pierson. 1998. National Range and Pasture Handbook: Grazingland Hydrology. Montana Interagency Training Symposium USDA-NRCS Range and Pasture Handbook October 19-22, 1999. Bozeman, Montana.

Spaeth, K.E., 1998. USDA-NRCS/ARS National Study Team Study WEPP Rangeland Parameter Data Sets. USDA-NRCS/ARS Joint Training Session on WEPP Model Interface, April 27-May1. West Lafayette, Indiana.

Spaeth, K.E. 1998. Grazingland Hydrology. Symposium on USDA-NRCS Range and Pasture Handbook. USDA-NRCS Grazingland Institute April 20-24th, 1998. Ft. Worth, Texas.

Spaeth, K.E. 1998. Status report on analysis of BLM 1997 Colorado Pilot Resource Inventory. February 23-25th, 1998. Symposium of Interagency National Resource Inventory and Assessment, Colorado BLM State Office, Denver Colorado.