Dale J. Bremer Associate Professor

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Education

Ph.D. Agronomy
 M.S. Agronomy
 B.S. Agronomy
 August 1998. Kansas State University, Manhattan, KS.
 December 1994. Kansas State University, Manhattan, KS.
 December 1985. University of Nebraska, Lincoln, NE.

Professional Experience

Research

- Evaluated drought and heat resistance of turfgrasses in the field, greenhouse, and growth chambers
- Assessed turfgrass quality and drought stress using remote sensing applications
- Conducted surveys of >30,000 Kansas residential homeowners about their lawn-watering habits
- Performed micrometerological experiments in carbon, nitrogen, water, and energy transport from various landscapes, including native and managed grassland ecosystems
- Measured/estimated water use of landscape plants, including in lawns in Manhattan and Wichita
- Constructed, tested, and deployed heat balance sap flow gauges, dual-probe heat-capacity sensors
- Assembled automated data acquisition systems for multi-instrument data collection
- Experienced with programming of Campbell Scientific and other dataloggers
- Proficient in operation of scientific instruments including portable photosynthesis measuring devices, meteorological instruments, gas chromatographs, diffusion porometers, and others
- Supervised graduate and undergraduate employees in operation of scientific equipment and in collection of samples in the field and laboratory
- Built and maintained website for my research program in turfgrass science at K-State

Teaching and Advising

Courses Taught:

- Hort 951, Horticulture Graduate Seminar (1 cr.; 2001-present)
- Hort 706, Turfgrass Science, (3 cr.; 2011-present)
- HORT 405 and HORT 640, Water Issues in the Lawn and Landscape (3 cr.; 2010-present)
- Hort 846, Plant Research Methods (3 cr.: 2002-2008)

Other teaching, instruction, and advising:

- Currently advise 10-12 undergraduate horticulture students
- Instructed grad students & technical staff in construction of complex environmental instruments
- Invited guest lecturer in: Hort 706 (Turfgrass Science; 2010 and earlier); MC 630 (Public Relations Case Studies); Agron 900 (Biometeorology)
- Field lectures describing Ameri-flux monitoring stations to interested groups, including USDA-ARS Wind Erosion Unit's 1997 International Symposium/Workshop, 1999 LTER Site Review of Konza Prairie Biological Station, Hort 846 (2002-2008) and Agron 220 (1997-2000) field trips.
- Tutored undergraduates in biology, algebra, calculus, physics, and chemistry

Agri-business

- Advised clients in cost-effective methods of crop production
- Implemented chemical, fertilizer and irrigation programs for farmers
- Inspected crops for weed and insect infestation levels
- Calibrated planting and spraying equipment
- Raised swine and cattle on family farm
- Achieved commercial pilots rating and aerially applied pesticides

Work History

2007-present	Associate Professor – Horticulture Dept, K-State, Manhattan, KS
2001-2007	Assistant Professor – Horticulture Dept, K-State, Manhattan, KS
2000-2001	Research Analyst – Kansas Farm Bureau – Manhattan, KS
1998-2000	Research Associate (post-doctoral) - Agronomy Dept, K-State, Manhattan, KS
1992-1998	Graduate Research Assistant - Agronomy Dept, K-State, Manhattan, KS
1989-92	Agricultural Technician - Southwest Kansas Research-Extension Center
	Kansas State University, Tribune, KS
1987-88	Shipper/Receiver - RUBBAIR Door Inc Ayer, MA
1984-86	Agronomist & Field Scout - Midwest Crop Consulting, Inc Holdrege, NE
To 1983	Family Farm and Ranch - Scotia, NE

Professional Memberships, Activities, and Noteworthy Awards

Outstanding Associate Editor, from the Editorial Board of Crop Science, 2012 Outstanding Researcher Award of Merit, K-State Gamma Sigma Delta, 2011 Associate Editor for Crop Science, 2007-present Crop Science Society of America American Society of Agronomy **International Turfgrass Society** American Society for Horticultural Science Gamma Sigma Delta Honor Society of Agriculture Golf Course Superintendents Association of America

Graduate Advising

Soil Science Society of America

Major Professor:			
Graduated: M.S.	1. John Markham 2. Hyeonju Lee		Current: Graduate Student, Kansas State Univ. Current: Research Assistant, Dept. Plant Pathology, Kansas State Univ.
Ph.D.	 Cody Domenghini Jason Lewis 	2010.	Current: Assistant Professor, Dept. Horticulture & Crop Science, California Polytechnic State Univ., San Luis Obispo
	2. Kemin Su	2007.	Current: Senior Research Specialist, Dept. Horticultural & Landscape Architecture, Oklahoma State Univ.

Ph.D. Current: 2 M.S.

Served on Committee:

M.S. Ph.D.

Ph.D., Outside Chair

Research Awards to Undergraduate and Graduate Students Advised

- 1. Cody Domenghini. 2011. Awarded the Kansas State University Gamma Sigma Delata Ph.D. Teaching Award for outstanding teaching performance by Ph.D. graduate students in agriculture.
- 2. Cody Domenghini. 2011. Awarded the Richard Elmore Brown Outstanding College of Agriculture Graduate Student Teaching Award for Ph.D. students.
- 3. Kenton Peterson. 2011. Runner Up, Governor's Award for Outstanding Graduate Poster at the Water and the Future of Kansas Conference, Topeka, KS.
- 4. Kira Arnold Shonkwiler, 2010. Governor's Award for Outstanding Graduate Poster at the Water and the Future of Kansas Conference, Topeka, KS.
- 5. Jason Lewis. 2009. Awarded the Richard Elmore Brown Outstanding College of Agriculture Graduate Student Teaching Award for Ph.D. students.

Research Awards to Undergraduate and Graduate Students Advised (continued)

- 6. Jason Lewis. 2008. Second place, C5 division's graduate student oral competition. International Annual Meetings of the ASA, CSSA, and SSSA, Houston, TX.
- 7. Jason Lewis. 2008. Awarded the Kansas State University Gamma Sigma Delata Ph.D. Teaching Award for outstanding teaching performance by Ph.D. graduate students in agriculture.
- 8. Jason Lewis. 2007. Second place, C5 division's graduate student poster competition. International Annual Meetings of the ASA, CSSA, and SSSA, New Orleans, LA.
- 9. Jason Lewis, 2005. Awarded Timothy R. Donoghue Graduate Scholarship. \$10,000 for two years.
- 10. Jason Graves. 2005. Graduated cum Laude in top 10 percent of graduating class in K-State's College of Agriculture.
- 11. Kemin Su, 2004. Third place, C5 division's graduate student poster competition. Paper: Su, K., D.J. Bremer, S.J. Keeley, and J.D. Fry. 2004. High temperature and drought effects of a Texas bluegrass hybrid compared with Kentucky bluegrass and tall fescue. International Annual Meetings of the ASA, CSSA, and SSSA, Seattle, WA.

Publications

<u>Peer-Reviewed:</u> NOTE: Names of my graduate research advisees are listed in italics when appearing as first author.:

- 1. *Lewis*, *J.D.*, **D.J. Bremer**, S.J. Keeley, and J.D. Fry. 2012. Wilt-based irrigation in Kentucky bluegrass: Effects on visual quality and irrigation amounts among cultivars. Crop Sci. (in press).
- 2. **Bremer, D.J.**, Lee, H., K. Su, and Steven J. Keeley. 2011. Relationships between normalized difference vegetation index and visual quality in cool-season turfgrass: I. Variation among species and cultivars. Crop Sci. 51:2212–2218.
- 3. **Bremer, D.J.**, Lee, H., K. Su, and Steven J. Keeley. 2011. Relationships between normalized difference vegetation index and visual quality in cool-season turfgrass: II. Factors Affecting NDVI and its Component Reflectances. Crop Sci. 51:2219–2227.
- 4. *Markham III, J.W.*, **D.J. Bremer**, C.R. Boyer, and K.R. Schroeder. 2011. Effects of container color on substrate temperatures and growth of red maple and redbud. HortScience 46:721-726.
- 5. *Lee*, *H.*, **D.J. Bremer**, K. Su, and Steven J. Keeley. 2011. Relationships between normalized difference vegetation index and visual quality in turfgrasses: Effects of mowing height. Crop Sci. 51:323-332.
- 6. Okeyo, D.O., J.D. Fry, **D.J. Bremer**, A. Chandra, D.A. Genovesi, and M.C. Engelke. 2011. Stolon Growth and Tillering of Experimental Zoysiagrasses in Shade. HortScience 46:1418–1422.
- 7. Okeyo, D.O., J.D. Fry, and **D.J. Bremer**, A. Chandra, D. Genovesi, and M.C. Engelke. 2011. Stolon growth characteristics and establishment rates of zoysiagrass progeny. HortScience 46:113-117.
- 8. Okeyo, D.O., J.D. Fry, **D. Bremer**, C.B. Rajashekar, M. Kennelly, A. Chandra, D.A. Genovesi, and M.C. Engelke. 2011. Freezing tolerance and seasonal color of experimental zoysiagrasses. Crop Sci. 51:2858–2863.
- 9. **Bremer, D.J.**, and J. M. Ham. 2010. Net carbon fluxes over burned and unburned native tallgrass prairie. Rangeland Ecol. Manage. 63:72-81.
- 10. *Su*, *K*., **D.J. Bremer**, R. Jeannotte, R. Welti, and C. Yang. 2009. Membrane lipid composition and heat tolerance in cool-season turfgrasses, including a hybrid bluegrass. J. Amer. Soc. Hort. Sci. 134:511-520.
- 11. *Su*, *K*., **D.J. Bremer**, S.J. Keeley, and J.D. Fry. 2009. Mowing and drought effects on a hybrid compared with a Kentucky bluegrass. Int. Turf. Soc. Res. J. 11:871-882.
- 12. St. John, R., J. Fry, **D. Bremer**, and S. Keeley. 2009. Establishment rate and lateral spread of *Festuca arundinacea* cultivars. Int. Turf. Soc. Res. J. 11:481-487.
- 13. Zhang, Q., J. Fry, X. Pan, C. Rajeshekar, **D. Bremer**, M. Engelke, and X. Wang. 2009. Acclimation of *Zoysia japonica* and *Z. matrella* and changes in rhizome abscisic acid levels. Int. Turf. Soc. Res. J. 11:883-892.

Peer-reviewed (continued)

- 14. Zhang, Q., J. Fry, C. Rajashekar, **D. Bremer**, and M. Engelke. 2009. Membrane polar lipid changes in zoysiagrass rhizomes and their potential role in freezing tolerance. J. Amer. Soc. Hort. Sci. 134:322-328.
- 15. *Su*, *K*., **D.J. Bremer**, S.J. Keeley, and J.D. Fry. 2008. Rooting characteristics and canopy responses to drought of turfgrasses including hybrid bluegrasses. Agron. J. 100:949-956.
- 16. Gao, J., D.G. Goodin, **D. Bremer**, and K. Su. 2008. Application of hyperspectral remote sensing in assessing turfgrass quality. Papers of the Applied Geography Conferences 31:95-104.
- 17. *Su*, *K*., **D.J. Bremer**, S.J. Keeley, and J.D. Fry. 2007. Effects of high temperature and drought on a hybrid bluegrass compared with Kentucky bluegrass and tall fescue. Crop Sci. 47:2152-2161. doi: 10.2135/cropsci2006.12.0781.
- 18. Griffin, J.J., W.R. Reid, and **D.J. Bremer**. 2007. Turf species affects establishment and growth of redbud and pecan. HortScience 42:267-271.
- 19. **Bremer, D.J.** 2006. Nitrous oxide fluxes in turfgrass: Effects of nitrogen fertilization rates and types. J. Environ. Qual. 35:1678-1685.
- 20. **Bremer, D.J.**, K. Su, S.J. Keeley, and J.D. Fry. 2006. Performance in the transition zone of two hybrid bluegrasses compared with Kentucky bluegrass and tall fescue. Applied Turfgrass Science doi:10.1094/ATS-2006-0808-02-RS
- 21. **Bremer, D.J.**, and J.M. Ham. 2005. Measurement and partitioning of *in situ* CO₂ fluxes in turfgrasses using a pressurized chamber. Agron. J. 97:627-632.
- 22. Zuk, A.J., **D.J. Bremer**, and J.D. Fry. 2005. Establishment of seeded zoysiagrass in a perennial ryegrass sward: Effects of soil-surface irradiance and temperature. Int. Turf. Soc. Res. J. 10:302-309.
- 23. **Bremer**, **D.J.** 2003. Evaluation of microlysimeters used in turfgrass evapotranspiration studies with the dual-probe heat-pulse technique. Agron. J. 95:1625-1632.
- 24. Turner, D.P., S. Urbanski, S.C. Wofsy, **D.J. Bremer,** T. Meyers, M. Gregory, and S.T. Gower. 2003. A Cross-biome Comparison of Light Use Efficiency for Gross Primary Production. Global Change Biol. 9:383-395.
- 25. **Bremer, D.J.**, and J.M. Ham. 2002. Measurement and modeling of soil CO₂ flux in a temperate grassland under mowed and burned regimes. Ecol. Appl. 12:1318-1328.
- 26. **Bremer, D.J.**, L.M. Auen, J.M. Ham, and C.E. Owensby. 2001. Evapotranspiration in a prairie ecosystem: Effect of grazing by cattle. Agron. J. 93:338-348.
- 27. **Bremer, D.J.**, and J.M. Ham. 1999. Effect of spring burning on the surface energy balance in a tallgrass prairie. Agric. For. Meteorol. 97:43-54.
- 28. Knapp, A.K., N. Bargman, L.A. Maragni, C.A. McAllister, **D.J. Bremer**, J.M. Ham, and C.E. Owensby. 1999. Elevated CO₂ and leaf longevity in the C₄ grassland-dominant *Andropogon gerardii*. Int. J. Plant Sci. 160:1057-1061.
- 29. **Bremer, D.J.**, J.M. Ham, C.E. Owensby, and A.K. Knapp. 1998. Responses of soil respiration to clipping and grazing in a tallgrass prairie. J. Environ. Qual. 27:1539-1548.
- 30. Owensby, C.E., J.M. Ham, A.K. Knapp, **D.J. Bremer**, and L.M. Auen. 1997. Water vapour fluxes and their impact under elevated CO₂ in a C4-tallgrass prairie. Global Change Biol. 3:189-195.
- 31. **Bremer, D.J.**, J.M. Ham, and C.E. Owensby. 1996. Effect of elevated atmospheric carbon dioxide and open-top chambers on transpiration in a tallgrass prairie. J. Environ. Qual. 25:691-701.
- 32. Ham, J.M, C.E. Owensby, P.I. Coyne, and **D.J. Bremer**. 1995. Fluxes of CO₂ and water vapor from a prairie ecosystem exposed to ambient and elevated atmospheric CO₂. Agric. For. Meteorol. 77:73-93.

Popular Trade Journals, Magazines, and Newsletters:

- 1. Goldsby, A., D. Bremer, J. Gry, and S. Keeley. 2011. Kentucky bluegrass drought response. Golf Course Management 79(9):104.
- 2. Bremer, D. 2011. Turfgrass, greenhouse gases, climate change, and the role of science. Turfnews: The Kansas Turfgreas Foundation Newsletter. Quarterly. January, p. 2-3.

Popular Trade Journals, Magazines, and Newsletters (continued)

- 3. Domenghini, J., and D. Bremer. 2010. New class at K-State, brief update on USDA-funded water project. Turfnews: The Kansas Turfgrass Foundation Newsletter. Quarterly. January, p. 4-5.
- 4. Lewis, J., and D. Bremer. 2010. Water use of Kentucky bluegrass and Texas bluegrass hybrids. Golf Course Management 78(1):120.
- 5. Kennelly, M., J. Fry, R. St. John, and D. Bremer. 2010. Cultural practices, environment, and pathogen biology: Studies for improved management of large patch of zoysiagrass. USGA. 2010 Turfgrass and Environmental Research Summary. p. 5.
- 6. Bremer, D., S. Keeley, J. Fry, and J. Lewis. 2009. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrass under a large rainout facility in the transition zone. USGA. 2009 Turfgrass and Environmental Research Summary. p. 38.
- 7. Bremer, D., J. Lewis, and J. Fry. 2009. Nitrous oxide emissions from bermudagrass turf fertilized with slow release and soluble nitrogen sources. Insights: Research in the Southern and Central Great Plains Region. International Plant Nutrition Institute. July, p.3.
- 8. St. John, R., J. Fry, D. Bremer, and S. Keeley. 2009. Establishment rate and lateral spread of tall fescue cultivars. Golf Course Management 77:113-118.
- 9. Kennelly, M., J. Fry, R. St. John, and D. Bremer. 2009. Cultural practices, environment, and pathogen biology: Studies for improved management of large patch of zoysiagrass. USGA. 2009 Turfgrass and Environmental Research Summary. p. 14.
- 10. Bremer, D.J. 2009. Turfgrass sequesters carbon. Southwest Trees & Turf. January, p. 6.
- 11. Bremer, D.J. 2008. Water restrictions are coming: Will we be ready? Turfnews: The Kansas Turfgrass Foundation Newsletter. Quarterly. October, p. 2-3.
- 12. Bremer, D.J., K. Su, S.J. Keeley, and J.D. Fry. 2008. Hybrid bluegrass vs. Kentucky blue and tall fescue in transition zone. SportsTurf (Official publication of the Sports Turf Managers Association). September. 24(9): p. 16-20.
- 13. Keeley, S., D. Bremer, and K. Su. 2008. Heat and drought performance of Texas bluegrass hybrid turf: Does this new turfgrass live up to the hype? USGA Green Section Record. November/December. 46(6): p. 21-14.
- 14. Kennelly, M., J. Fry, R. St. John, and D. Bremer. 2008. Cultural practices, environment, and pathogen biology: Studies for improved management of large patch of zoysiagrass. USGA. 2008 Turfgrass and Environmental Research Summary. p. 20.
- 15. Bremer, D.J., S.J. Keeley, J.D. Fry, and J.D. Lewis. 2008. Comparative irrigation requirements: A close look at 30 Kentucky bluegrass cultivars under a protective rainout facility in the transition zone. Turf News (Official publication of Turfgrass Producers International). May/June. 31(3): p. 56-60.
- 16. Bremer, D.J. 2007. Carbon sequestration in turfgrass: An eco-friendly benefit of your lawn. Turfnews: The Kansas Turfgrass Foundation Newsletter. October, p.2 and 5.
- 17. Bremer, D.J., J.D. Fry, and S.J. Keeley. 2007. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. USGA. 2006 Turfgrass and Environmental Research Summary. p. 8.
- 18. Bremer, D.J., J.D. Fry, and S.J. Keeley. 2007. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. Turf News (Official publication of Turfgrass Producers International). May/June. 30(3): p. 50-52.
- 19. Bremer, D.J., J.D. Fry, and S.J. Keeley. 2006. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. USGA 2007 Research Summary. October 2006. p. 12.
- 20. Bremer, D.J., K. Su, S.J. Keeley, and J.D. Fry. 2006. Comparison of performance of two hybrid bluegrasses with Kentucky bluegrass and tall fescue. Golf Course Management 74(12) 78-82.

Popular Trade Journals, Magazines, and Newsletters (continued)

- 21. Bremer, D.J. 2006. Texas bluegrass hybrids: The real deal for Kansas or is the jury still out? Turfnews: The Turfgrass Foundation Newsletter. October, p.2.
- 22. Bremer, D.J. 2005. Laughing turfgrass warms mother earth. Turfnews: The Kansas Turfgrass Foundation Newsletter. October, p.2-3.
- 23. Bremer, D.J. 2004. Evapotranspiration and precipitation in Kansas: Part II. Turfnews: The Kansas Turfgrass Foundation Newsletter. January, p. 3-4.
- 24. Bremer, D.J., and J.M. Ham. 2003. Soil moisture sensors can help regulate irrigation. Golfdom: Turfgrass Trends. June, p. 49-54.
- 25. Bremer, D.J. 2003. Evapotranspiration and precipitation in Kansas: Part I. Turfnews: The Kansas Turfgrass Foundation Newsletter. January, p. 3-4.
- 26. Bremer, D.J. 2002. Texas bluegrass for use in golf course fairways and roughs. Golf Course Management. August, p. 64.

K-State Turfgrass Research Reports:

- 1. Bremer, D., J. Fry, S. Keeley, C. Lavis, and L. Moley. 2011. Modifying homeowners' lawnwatering habits: A survey. K-State Turfgrass Research Report of Progress 1035, p. 76-83.
- 2. Bremer, D., H. Lee, K. Su., and S. Keeley. 2011. Relationships between NDVI and visual quality in cool-season turfgrass: Variation among species and cultivars. K-State Turfgrass Research Report of Progress 1035, p. 92-96.
- 3. Bremer, D., H. Lee, K. Su., and S. Keeley. 2011. Relationships between NDVI and visual quality in cool-season turfgrass: Factors affecting NDVI and its component reflectances. K-State Turfgrass Research Report of Progress 1035, p. 97-101.
- 4. Domenghini, C. D. Bremer, J. Fry, and G. Davis. 2011. Responses of turfgrass and ornamental landscape species to prolonged drought stress. K-State Turfgrass Research Report of Progress 1035, p.72-75.
- 5. Goldsby, A. and D. Bremer. 2011. Utilizing hyperspectral radiometry to predict green leaf area index of Kentucky bluegrass. K-State Turfgrass Research Report of Progress 1053, p. 102-105.
- 6. Goldsby, A., D. Bremer, S. Keeley, and J. Fry. 2011. Response of Kentucky bluegrass cultivars to prolonged drought in the transition zone. K-State Turfgrass Research Report of Progress 1053, p. 68-71.
- 7. Peterson, K., J. Fry, and D. Bremer. 2011. Long-term changes of selected zoysiagrass grown under dense shade. K-State Turfgrass Research Report of Progress 1053, p. 64-67.
- 8. Peterson, K., K. Shonkwiler Arnold, and D. Bremer. 2011. Custom light box for digital image turfgrass analysis. K-State Turfgrass Research Report of Progress 1035, p. 89-91.
- 9. Shonkwiler Arnold, K., K. Peterson, and D. Bremer. 2011. Fabrication of a new custom photosynthesis chamber. K-State Turfgrass Research Report of Progress 1035, p. 84-88.
- 10. Arnold, K., D. Bremer, and J. Ham. 2010. Measuring evapotranspiration in urban irrigated lawns: Current findings and future research. K-State Turfgrass Research Report of Progress 1035, p. 1-8.
- 11. Lewis, J. and D. Bremer. 2010. Measurements of photosynthesis, respiration, and evapotranspiration in turfgrass with a custom surface chamber. K-State Turfgrass Research Report of Progress 1035, p. 9-14.
- 12. Bremer, D. and J. Lewis. 2010. Potential for slow-release polymer-coated and organic nitrogen fertilizers to mitigate greenhouse gas (nitrous oxide) emissions in turfgrass. K-State Turfgrass Research Report of Progress 1035, p. 15-21.
- 13. Bremer, D., H. Lee, K. Su., and S. Keeley. 2010. Relationships between spectral reflectance and visual quality in turfgrasses: Effects of mowing height. K-State Turfgrass Research Report of Progress 1035, p. 22-28.

K-State Turfgrass Research Reports (continued)

- 14. Lewis, J., D. Bremer, S. Keeley, and J. Fry. 2010. Irrigation requirements of 28 Kentucky bluegrass cultivars and two Texas bluegrass hybrids in the transition zone. K-State Turfgrass Research Report of Progress 1035, p. 74-79.
- 15. Okeyo, D., J. Fry, D. Bremer, and C. Rajashekar. 2010. Freeze tolerance and seasonal color retention of zoysiagrasses. K-State Turfgrass Research Report of Progress 1035, p. 89-91.
- 16. Bremer, D., J. Lewis, and J. Ham. 2009. Measurements of photosynthesis, respiration, and evapotranspiration in turfgrass with a custom surface chamber. K-State Turfgrass Research Report of Progress 1015, p. 20-27.
- 17. Lee, H., D. Bremer, and K. Su. 2009. Comparing estimates of turfgrass quality obtained using normalized difference vegetation index, digital imagery, and the human eye. K-State Turfgrass Research Report of Progress 1015, p. 28-32.
- 18. Lewis, J., D. Bremer, S. Keeley, and J. Fry. 2009. Genetic rooting potential of 28 Kentucky bluegrass cultivars and two Texas bluegrass hybrids. K-State Turfgrass Research Report of Progress 1015, p. 33-37.
- 19. Okeyo, D., J. Fry, and D. Bremer. 2009. Growth of zoysiagrasses under moderate shade. K-State Turfgrass Research Report of Progress 1015, p. 43-47.
- 20. Bremer, D.J., S.J. Keeley, J.D. Fry, and J.D. Lewis. 2008. Irrigation requirements of 28 Kentucky bluegrass cultivars and two Texas bluegrass hybrids in the transition zone. K-State Turfgrass Research Report of Progress 998, p. 3-8.
- 21. Bremer, D., and J. Lewis. 2008. Potential for slow-release polymer coated and organic nitrogen fertilizers to mitigate greenhouse gas (nitrous oxide) emissions in turfgrass. K-State Turfgrass Research Report of Progress 998, p. 24-26.
- 22. Bremer, D., J. Lewis, J. Deusterhaus, and J. Ham. 2008. Measurement of photosynthesis and respiration in turfgrass with large and small surface chambers. K-State Turfgrass Research Report of Progress 998, p. 20-23.
- 23. Lewis, J., and D. Bremer. 2008. Emissions of nitrous oxide from three different turfgrass species. K-State Turfgrass Research Report of Progress 998, p. 27-31.
- 24. Fry, J., R. St. John, D. Bremer, and S. Keeley. 2008. Compare lateral spread of tall fescue cultivars and blends with Kentucky bluegrass. K-State Turfgrass Research Report of Progress 998, p. 38-41.
- 25. Bremer, D.J., S.J. Keeley, J.D. Fry, and J.D. Lewis. 2007. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. K-State Turfgrass Research Report of Progress 981, p. 41.
- 26. Lee, H., D.J. Bremer, and K. Su. 2007. Evaluation of turfgrass quality and green leaf area index and aboveground biomass with multispectral radiometry. K-State Turfgrass Research Report of Progress 981, p. 6.
- 27. Lewis, J.D., and D.J. Bremer. 2007. Emissions of nitrous oxide from three different turfgrass species and from perennial ryegrass under different irrigation regimes. K-State Turfgrass Research Report of Progress 981. p.80.
- 28. Fry, J.D., D.J. Bremer, S.J. Keeley, and R. St. John. 2007. Lateral spread of tall fescue cultivars and blends. K-State Turfgrass Research Report of Progress 981, p. 10.
- 29. Su, K., D.J. Bremer, S.J. Keeley, and J.D. Fry. 2007. Effects of high temperature and drought on a hybrid bluegrass compared with Kentucky bluegrass and tall fescue. K-State Turfgrass Research Report of Progress 981, p. 46.
- 30. Su, K., D.J. Bremer, S.J. Keeley, and J.D. Fry. 2007. Effects of drought on the performance of two hybrid bluegrasses Kentucky bluegrass, and tall fescue. K-State Turfgrass Research Report of Progress 981, p. 36.

K-State Turfgrass Research Reports (continued)

- 31. Su, K., D.J. Bremer, S.J. Keeley, and J.D. Fry. 2007. Mowing height and drought effects on a Texas bluegrass hybrid compared with Kentucky bluegrass. K-State Turfgrass Research Report of Progress 981, p. 50.
- 32. Zhang, Q., J.D. Fry, M. Engelke, D. Genovesi, and D.J. Bremer. 2007. Freezing tolerance of new zoysiagrass progeny. K-State Turfgrass Research Report of Progress 981, p. 55.
- 33. Bremer, D.J. 2006. Diurnal trends in and transient effects of nitrogen fertilization and irrigation on, nitrous oxide fluxes in turfgrasses. K-State Turfgrass Research Report of Progress 962.
- 34. Bremer, D.J. 2006. Effects of turfgrass species on nitrous oxide fluxes under typical nitrogen-management regimes. K-State Turfgrass Research Report of Progress 962.
- 35. Bremer, D.J. 2006. Effects of nitrogen fertilizer types and rates and irrigation on nitrous oxide fluxes in turfgrass. K-State Turfgrass Research Report of Progress 962.
- 36. Lee, H., D.J. Bremer, and K. Su. 2006. Evaluation of turfgrass quality with multispectral radiometry in a rainout shelter study. K-State Turfgrass Research Report of Progress 962.
- 37. Zhang, Q., J.D. Fry, M. Engelke, D. Genovesi, and D.J. Bremer. 2006. Preliminary evaluation of freezing tolerance of new zoysiagrass progeny. K-State Turfgrass Research Report of Progress 962.
- 38. Su, K. D.J. Bremer, Richard Jeannotte, and Ruth Welti. 2006. Membrane lipid composition and heat tolerance in Kentucky bluegrass, tall fescue, and a hybrid bluegrass. K-State Turfgrass Research Report of Progress 962.
- 39. Bremer, D.J., K. Su, S.J. Keeley, and J.D. Fry. 2006. Root lengths of two hybrid bluegrasses, Kentucky bluegrass, and tall fescue: A greenhouse study. K-State Turfgrass Research Report of Progress 962.
- 40. Bremer, D.J., K. Su, S.J. Keeley, and J.D. Fry. 2006. Root lengths of two hybrid bluegrasses, Kentucky bluegrass, and tall fescue: A field study. K-State Turfgrass Research Report of Progress 962.
- 41. Bremer, D.J., K. Su, S.J. Keeley, and J.D. Fry. 2006. Performance in the transition zone of two hybrid bluegrasses compared with Kentucky bluegrass and tall fescue. K-State Turfgrass Research Report of Progress 962.
- 42. Bremer, D.J., J.D. Fry, S.J. Keeley, and K. Su. 2005. Drought resistance of two cultivars of Texas bluegrass hybrid compared with Kentucky bluegrass and tall fescue. K-State Turfgrass Research Report of Progress 946.
- 43. Bremer, D.J. 2005. Effects of nitrogen fertilizer types and rates and irrigation on nitrous oxide fluxes in turfgrass. K-State Turfgrass Research Report of Progress 946.
- 44. Bremer, D.J., and K. Su. 2005. Evaluation of turfgrass quality with multispectral radiometry. K-State Turfgrass Research Report of Progress 946.
- 45. Su, K, D.J. Bremer, S.J. Keeley, and J.D. Fry. 2005. Comparison of the heat and drought tolerances of a Texas bluegrass hybrid compared with Kentucky bluegrass and tall fescue: A growth chamber study. K-State Turfgrass Research Report of Progress 946.
- 46. Zhang, Q., J. Fry, D. Bremer, and S. Keeley. 2005. Evaluation of abscisic acid (ABA) in drought stress suppression on turfgrass. K-State Turfgrass Research 2004 Report of Progress 946.
- 47. Zuk, A.J., D.J. Bremer, and J.D. Fry. 2005. Establishment of seeded zoysiagrass in a perennial sward: Effects of soil-surface irradiance and temperature. K-State Turfgrass Research Report of Progress 946.
- 48. Bremer, D., K. Su, J. Fry, and S. Keeley. 2004. Drought resistance of two cultivars of Texas bluegrass hybrid compared with Kentucky bluegrass and tall fescue. K-State Turfgrass Research Report of Progress 929.

K-State Turfgrass Research Reports (continued)

- 49. Bremer, D.J. 2004. Nitrous Oxide Fluxes in Turfgrass: Effects of irrigation and nitrogen fertilization rates. K-State Turfgrass Research Report of Progress 929.
- 50. Bremer, D.J., K. Su, S. Keeley, and J. Fry. 2004. Preliminary examination of the heat tolerance of a Texas bluegrass hybrid compared with Kentucky bluegrass and tall fescue. K-State Turfgrass Research Report of Progress 929.
- 51. Bremer, D.J., and J.M. Ham. 2004. Measurement and partitioning of *in situ* CO₂ fluxes in turfgrasses using a pressurized chamber. K-State Turfgrass Research Report of Progress 929.
- 52. Bremer, D.J., K. Su, S.J. Keeley, and J.D. Fry. 2003. Drought resistance of two Texas bluegrass hybrids compared with Kentucky bluegrass and tall fescue. K-State Turfgrass Research Report of Progress 911.
- 53. Bremer, D.J. 2003. Evaluating microlysimeters used in turfgrass evapotranspiration studies using the dual-probe heat-pulse technique. K-State Turfgrass Research Report of Progress 911.

Progress Reports to Funding Agencies:

- 1. Bremer, D., J. Fry, and J. Lewis. 2008. Potential for slow-release polymer-coated and organic nitrogen fertilizers to reduce greenhouse gas (nitrous oxide) emissions in turfgrass. Annual Research Update to Agrium, Inc. February.
- 2. Bremer, D., J. Fry, and J. Lewis. 2008. Potential for slow-release polymer-coated and organic nitrogen fertilizers to reduce greenhouse gas (nitrous oxide) emissions in turfgrass. Annual Research Update to International Plant Nutrition Institute (IPNI). January.
- 3. Bremer, D.J., J.D. Fry, and S.J. Keeley. 2007. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. USGA Research Update Full Report. December.
- 4. Bremer, D.J., J.D. Fry, and S.J. Keeley. 2006. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. U.S. Golf Association Research Update Full Report. December 2006.
- 5. Bremer, D.J. 2006. Nitrous oxide fluxes in turfgrass: Effects of irrigation and nitrogen fertilization rates. Final project report to Kansas NSF EPSCoR. July 2006.
- 6. Bremer, D.J., K. Su, S.J. Keeley, and J.D. Fry. 2005 progress report for The Scotts Company: Effects of drought and mowing height on two Texas bluegrass hybrids, Kentucky bluegrass, and tall fescue. Annual Report to The Scotts Company. December 2005.
- 7. Bremer, D.J., J.D. Fry, and C. Rajashekar. 2005. Mid-year report for GCSAA: Evaluation of Texas bluegrass for use in golf course fairways and roughs. Semi-Annual Report to the Golf Course Superintendents Association of America. May.
- 8. Bremer, D.J. 2004. Nitrous oxide fluxes in turfgrass: Effects of irrigation and nitrogen fertilization rates. Final report to Kansas NSF EPSCoR Phase IV. November.
- 9. Bremer, D.J., J.D. Fry, and C. Rajashekar. 2004 year-end report for GCSAA: Evaluation of Texas bluegrass for use in golf course fairways and roughs. Annual Report to the Golf Course Superintendents Association of America. December 2004.
- 10. Bremer, D.J., and J.D. Fry. 2004 progress report for The Scotts Company: Drought resistance of two cultivars of Texas bluegrass compared with Kentucky bluegrass and tall fescue. Annual Report to The Scotts Company. December 2004.
- 11. Bremer, D.J., J.D. Fry, and C. Rajashekar. 2004. Mid-year report for GCSAA: Evaluation of Texas bluegrass for use in golf course fairways and roughs. Semi-Annual Report to the Golf Course Superintendents Association of America. May.
- 12. Bremer, D.J. 2003. Nitrous oxide fluxes in turfgrass: Effects of irrigation and nitrogen fertilization rates. Year 1 report to Kansas NSF EPSCoR Phase IV. December.

Progress Reports to Funding Agencies (continued)

- 13. Bremer, D.J. 2003. Nitrous oxide fluxes in turfgrass: Effects of irrigation and nitrogen fertilization rates. Description for general public for First Award Project funded by Kansas NSF EPSCoR.
- 14. Bremer, D.J., J.D. Fry, and C. Rajashekar. 2003. Year-end report for GCSAA: Evaluation of Texas bluegrass for use in golf course fairways and roughs. Annual Report to the Golf Course Superintendents Association of America. December.
- 15. Bremer, D.J., and J.D. Fry. 2003. Progress report for The Scotts Company: Drought resistance of two cultivars of Texas bluegrass compared with Kentucky bluegrass and tall fescue. Annual Report to The Scotts Company. December.
- 16. Bremer, D.J., J.D. Fry, and C. Rajashekar. 2003. Mid-year report for GCSAA: Evaluation of Texas bluegrass for use in golf course fairways and roughs. Semi-Annual Report to the Golf Course Superintendents Association of America. May.
- 17. Bremer, D.J., and J.D. Fry. 2002. Progress report for The Scotts Company: Drought resistance of two cultivars of Texas bluegrass compared with Kentucky bluegrass and tall fescue. Annual Report to The Scotts Company. October.

Special Reports for Private Industry

- 1. Bremer, D.J. 2001. Carbon sequestration in agricultural lands: An overview. Kansas Farm Bureau. Manhattan, KS.
- 2. Bremer, D.J. 2001. Contributions of agriculture to the Kansas economy and to the Kansas export market with emphasis on Japan. Kansas Farm Bureau. Manhattan, KS.

Extension Publications

- 1. Bremer, D.J., and D.L. Frickel. 1992. Weather information at Tribune. p. 4. *In* 1992 Field Day Report, Southwest Kansas Research-Extension Center. Garden City, KS.
- 2. Bremer, D.J., and D.L. Frickel. 1991. Weather information at Tribune. p. 2. *In* 1991 Field Day Report, Southwest Kansas Research-Extension Center. Garden City, KS.
- 3. Schlegel, A.J., and D.J. Bremer. 1991. Greeley County irrigated corn performance test results. pp. 26-28. *In* 1991 Kansas Performance Tests with Corn Hybrids. Kansas State University, Manhattan, KS.
- 4. Schlegel, A.J., and D.J. Bremer. 1991. Greeley County fallow and irrigated grain sorghum performance test results. pp. 32-35. *In* 1991 Kansas Performance Tests with Grain Sorghum Hybrids. Kansas State University, Manhattan, KS.
- 5. Schlegel, A.J., D.J. Bremer, and D.F. Frickel. 1991. Corn and grain sorghum response to tillage, preplant irrigation, and phosphorus placement. pp. 17-19. *In* 1991 Field Day Report, Southwest Kansas Research-Extension Center, Manhattan, KS.
- 6. Schlegel, A.J., and D.J. Bremer. 1990. Optimum scheduling of limited irrigation for grain sorghum. pp. 5-7. *In* 1990 Field Day Report, Southwest Kansas Research-Extension Center, Manhattan, KS.

Grant Proposals Funded

- 1. Bremer, D.J. 2011. General Turfgrass Research. Kansas Turfgrass Foundation. Funded. **\$12,000**.
- 2. Bremer, D.J. 2010. General Turfgrass Research. Kansas Turfgrass Foundation. \$8,750.
- 3. Bremer, D.J. 2009. General Turfgrass Research. Kansas Turfgrass Foundation. \$10,000.
- 4. Bremer, D.J., Ham, J.M., Keeley, S.J., Fry, J.D., Lavis, C., Moley, L., and St. John, R. 2008-2011. Modifying homeowners' lawn-irrigation behavior to conserve water and improve water quality in urbanizing watersheds. USDA National Integrated Water Quality Program. **\$600,000**.
- 5. Keeley, S., J. Fry, and D. Bremer. 2008. An Undergraduate Certificate Program in Turfgrass Management. Div. of Continuing Education, Kansas State University. **\$14,639**.
- 6. Bremer, D.J. 2008. General Turfgrass Research. Kansas Turfgrass Foundation. \$9,000.
- 7. Bremer, D.J. 2007. General Turfgrass Research. Kansas Turfgrass Foundation. \$11,000.

Grant proposals funded (continued)

- 8. Bremer, D.J., and J.D. Lewis. 2007-2008. Potential for slow-release polymer-coated and organic nitrogen fertilizers to reduce greenhouse gas (nitrous oxide) emissions in turfgrass. Agrium, Inc. \$8,750.
- 9. Bremer, D.J., J.D. Fry, and J.D. Lewis. 2007-2008. Potential for slow-release polymer-coated and organic nitrogen fertilizers to reduce greenhouse gas (nitrous oxide) emissions in turfgrass. International Plant Nutrition Institute, Inc. \$8,000.
- 10. Fry, J.D., Q. Zhang, D.J. Bremer, and C. Rajashekar. 2007. Freezing tolerance of new zoysiagrass progeny and identification of physiological contributors to hardiness. Heart of America Golf Course Superintendents Association. \$ 8,000.
- 11. Fry, J., Q. Zhang, R. St. John, C. Rajashekar, D. Bremer, M. Kennelly, M. Engelke, and D. Genovesi. 2007-2008. Screening new zoysiagrass progeny for freezing, drought, and disease resistance. Kansas Agricultural Experiment Station. \$14,672.
- 12. Kennelly, M., J. Fry, R. St. John, and D. Bremer. 2008-2010. Cultural practices, environment, and pathogen biology: studies for improved management of large patch (*Rhizoctonia solani* AG2-2). \$46,806.
- 13. Bremer, D.J., J.D. Fry, and S.J. Keeley. 2006-2008. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. U.S. Golf Association. \$47,058.
- 14. Bremer, D.J. 2006. Funding for general turfgrass research. Kansas Turfgrass Foundation. **\$12,800**.
- 15. Bremer, D.J., J.D. Fry, and S.J. Keeley. 2006-2008. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. Turfgrass Producers International. \$10,000.
- 16. Fry, J., Q. Zhang, D. Bremer, and C. Rajashekar. 2006. Freezing tolerance of new zoysiagrass progeny and identification of physiological contributors to hardiness. Heart of America Golf Course Superintendents Association. \$ 8,000.
- 17. Bremer, D.J., and C. Shoemaker. 2006-2007. Renewal of K-State Graduate School Timothy R. Donoghue Graduate Scholarship. **\$5,000** for Jason Lewis salary (Doctoral student).
- 18. Bremer, D.J. 2005. Funding for general turfgrass research. Kansas Turfgrass Foundation. **\$16,000**.
- 19. Keeley, S., J. Fry, and D. Bremer. 2005-2007. Nitrogen Source and Timing Effect on Carbohydrate Status of Cool- and Warm-Season Turfgrasses. Pursell Technologies, Inc. **\$8,000**.
- 20. Bremer, D.J., J.D. Fry, and S.J. Keeley. 2005-2006. Membrane lipid composition and heat tolerance in Kentucky bluegrass, tall fescue, and a hybrid bluegrass. The Scotts Co. \$3,000.
- 21. Bremer, D.J. 2005-2006. Travel to 10th International Turfgrass Research Conference 2005, Llandudno, Wales, UK. President's Faculty Development Award (FDA). K-State Office of Research and Sponsored Programs. **\$1,400**.
- 22. Bremer, D.J., and C. Shoemaker. 2005-2006. K-State Graduate School Timothy R. Donoghue Graduate Scholarship. **\$5,000** for Jason Lewis salary (Doctoral student). July 2005 June 2006.
- 23. Bremer, D.J. 2004. Funding for general turfgrass research. Kansas Turfgrass Foundation. **\$13,250**.
- 24. Bremer, D.J. 2003-2004. Nitrous oxide fluxes in turfgrass: Effects of irrigation and nitrogen fertilization rates. Kansas National Science Foundation (NSF) Experimental Program to Stimulate Competitive Research (EPSCoR). **\$48,250**.
- 25. Bremer, D.J. 2003. Funding for general turfgrass research. Kansas Turfgrass Foundation. **\$10,000**.
- 26. Bremer, D.J., and J.D. Fry. 2002-2004. Drought resistance of two cultivars of Texas bluegrass compared with Kentucky bluegrass and tall fescue. The Scotts Co. **\$21,000**.
- 27. Bremer, D.J. 2002. Funding for general turfgrass research. Kansas Turfgrass Foundation. **\$10,000**.

Grant proposals funded (continued)

- 28. Bremer, D.J., J.D. Fry, and C. Rajeshekar. 2002-2006. Evaluation of Texas bluegrass for use in golf course fairways and roughs. Golf Course Superintendents Association of America (GCSAA). **\$9.000**.
- 29. Bremer, D.J. 2001. Funding for general turfgrass research. Kansas Turfgrass Foundation. \$5,000.

Total Grants Funded at Kansas State University from 2001 to 2011: \$984,375

Professional Presentations/Abstracts

- 1. Bremer, D., J. Fry, S. Keeley, C. Lavis, R. St. John, and L. Moley. 2011. A survey of lawn-irrigation behaviors of residential homeowners. 2011. ASHS Annual Meetings, Waikoloa, HI, September 27.
- 2. Domenghini , J.C., D. Bremer, G. Davis, and J. Fry. 2011. Responses of turfgrass and ornamental landscape species to prolonged drought stress. 2011 ASHS Annual Meetings, Waikoloa, HI, September 27.
- 3. Goldsby, A., D. Bremer, J. Fry and S. Keeley. 2011. Response of Kentucky bluegrass cultivars to prolonged drought in the transition zone. International Annual Meetings of the ASA, CSSA, and SSSA, San Antonio, TX. October 17, 2011.
- 4. Peterson, K.W., D.J. Bremer, J.D. Fry, S.J. Keeley, and M.B. Kirkham. 2011. Estimating evapotranspiration in turfgrass: Comparison among measurement techniques. International Annual Meetings of the ASA, CSSA, and SSSA, San Antonio, TX. October 17, 2011.
- 5. Shonkwiler, K.B., D. Bremer, and J.M. Ham. 2011. Measuring evapotranspiration in urban irrigated lawns in two Kansas cities. American Geophysical Union (AGU) Fall Meetings, San Francisco, CA. December 8, 2011.
- 6. St. John, R., K.B. Shonkwiler-Arnold, D.J. Bremer, and J.M. Ham. 2011. USDA-NIFA Land Grant and Sea Grant Water Conference, Washington D.C. January 31, 2011.
- 7. Obasa, K., D. Bremer, R. St. John, J. Fry, and M. Kenelly. 2011. Effects of cultivation and fertility timing on large patch disease of zoysiagrass. Presented at the Annual Meetings of the ASA-CSSA-SSSA, San Antonio, TX on October 18, 2011.
- 8. Bremer, D., J. Fry, S. Keeley, C. Lavis, R. St. John, and L. Moley. *Modifying homeowners' lawn irrigation behavior: A survey*. Kansas Natural Resources Conference, Wichita, KS, January 21, 2011.
- 9. Peterson, K.W., D.J. Bremer, J.D. Fry, S.J. Keeley, and M.B. Kirkham. 2011. Estimating evapotranspiration in turfgrass: Comparison among measurement techniques. Water and the Future of Kansas Conference, Topeka, KS, September 30.
- 10. Shonkwiler-Arnold, K., D. Bremer, and J. Ham. 2010. Measuring evapotranspiration in urban irrigated lawns. International Annual Meetings of the ASA, CSSA, and SSSA, Long Beach, CA, November 2.
- 11. Bremer, D.J. 2010. Modifying homeowners' lawn irrigation behavior to conserve water and improve water quality. Water and the Future of Kansas Conference, Topeka, KS, October 26 (invited).
- 12. Domenghini , J.C., D. Bremer, J. Fry, S. Keeley, and C. Lavis. 2010. New online course examines critical water issues related to irrigation in urban watersheds. Water and the Future of Kansas Conference, Topeka, KS, October 26.
- 13. Peterson, K., D. Bremer, J. Domenghini, J. Fry, S. Keeley, C. Lavis, R. St. John, and L. Moley. 2010. Conserving water and improving water quality in urban watersheds: Survey of residential homeowners in Wichita, Olathe, and Salina about lawn irrigation. Water and the Future of Kansas Conference, Topeka, KS, October 26.

- 14. Shonkwiler-Arnold, K., D. Bremer, and J. Ham. 2010. Measuring evapotranspiration in urban irrigated lawns. Water and the Future of Kansas Conference, Topeka, KS, October 26.
- 15. Domenghini , J.C., D. Bremer, J. Fry, S. Keeley, and C. Lavis. New online course examines critical water issues related to irrigation in urban watersheds. 2010 ASHS Annual Meetings, Palm Desert, CA, August 2.
- 16. Shonkwiler-Arnold, K., D. Bremer, and J. Ham. 2010. Measuring evapotranspiration in urban irrigated lawns. Ninth Symposium on the Urban Environment, American Meteorlogical Society, Keystone, CO, August 2.
- 17. Peterson, K., D. Bremer, J. Domenghini, J. Fry, S. Keeley, C. Lavis, R. St. John, and L. Moley. Conserving water and improving water quality in urban watersheds: Survey of residential homeowners in Wichita, Olathe, and Salina about lawn irrigation. 2010 USDA-NIFA Land Grant and Sea Grant National Water Quality Conference, Hilton Head Island, SC, February 23.
- 18. Obasa, K., M. Kenelly, J. Fry, D. Bremer, and R. St. John. 2010. Ecology and management of large patch disease of zoysiagrass. K-State Research Forum, K-State Student Union, February 18.
- 19. Domenghini, J., D. Bremer, K. Peterson, J. Fry, S. Keeley, C. Lavis, R. St. John, and L. Moley. Water issues in the lawn and landscape: A new online course examining critical water issues related to irrigation in urban watersheds. 2010 Kansas Natural Resources Conference, Wichita, KS, February 4.
- 20. Peterson, K., D. Bremer, J. Domenghini, J. Fry, S. Keeley, C. Lavis, R. St. John, and L. Moley. Conserving water and improving water quality in urban watersheds: Survey of residential homeowners in Wichita, Olathe, and Salina about lawn irrigation. 2010 Kansas Natural Resources Conference, Wichita, KS, February 4.
- 21. Obasa, K., R. St. John, D. Bremer, J. Fry, and M. Kenelly. 2010. Effects of fertility and cultivation practices on large patch disease of zoysiagrass, caused by *Rhizoctonia solani* AG 2-2 LP. Phytopathology 100:S91 (Charlotte, NC).
- 22. Lewis, J., D. Bremer, and J. Ham. 2009. Measurements of photosynthesis and evapotranspiration in turfgrass under drought stress with a custom surface chamber. International Annual Meetings of the ASA, CSSA, and SSSA, Pittsburgh, PA, November 3.
- 23. Okeyo, D., J. Fry, D. Bremer, M.C. Engelke, and D. Genovesi. 2009. Zoysiagrass stolon growth and tillering under moderate shade. International Annual Meetings of the ASA, CSSA, and SSSA, Pittsburgh, PA, November 3.
- 24. Okeyo, D., J. Fry, D. Bremer, C. Rajashekar, M.C. Engelke, and D. Genovesi. 2009. Spring and fall color of zoysiagrasses and associated freeze tolerance. International Annual Meetings of the ASA, CSSA, and SSSA, Pittsburgh, PA, November 2.
- 25. Su, K., D.J. Bremer, S.J. Keeley, and J.D. Fry. 2009. Mowing and drought effects on a hybrid bluegrass compared with a Kentucky bluegrass. 11th International Turfgrass Research Conference (Santiago, Chile).
- 26. Bremer, D.J. J.D. Lewis, J.M. Ham, and J.L. Deusterhaus. 2008. Grassland measurements of photosynthesis and respiration with surface chambers. International Annual Meetings of the ASA, CSSA, and SSSA, Houston, TX, October 7.
- 27. Lewis, J.D., D.J. Bremer, S.J. Keeley, and J.D. Fry. 2008. Comparative irrigation requirements of 28 cultivars of Kentucky bluegrasses and two Texas bluegrass hybrids in the transition zone. International Annual Meetings of the ASA, CSSA, and SSSA, Houston, TX, October 6.
- 28. Bremer, D.J. J.D. Lewis, J.L. Deusterhaus, and J.M. Ham. 2007. Measurement of photosynthesis and respiration in turfgrass with large and small chambers. ASA Annual Meeting (New Orleans, LA).
- 29. Lewis, J.D., and D.J. Bremer. 2007. Mitigation of nitrous oxide emissions from turfgrasses using controlled-release fertilizers. ASA Annual Meeting (New Orleans, LA).
- 30. Lewis, J.D., D.J. Bremer, S.J. Keeley, and J.D. Fry. 2007. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. ASA Annual Meeting (New Orleans, LA).

- 31. Frank, E.E., S.E. Travers, S.H. Hulbert, J.E. Leach, J.Bai, P.S. Schnable, M.D. Smith, R. Welti, D.J. Bremer, and K.A. Garrett. 2007. Rust and drought effects on gene expression and phytohormone concentration in the dominant species of tallgrass prairie. Phytopathology 97:S36. (San Diego, CA).
- 32. Su, K., D.J. Bremer, S.J. Keeley, and J.D. Fry. 2006. Effects of mowing height and drought on Kentucky bluegrass and a hybrid bluegrass. ASA Annual Meeting (Indianopolis, IN).
- 33. Lewis, J.D., and D.J. Bremer. 2006. Effects of turfgrass species on nitrous oxide fluxes under typical nitrogen management regimes. ASA Annual Meeting (Indianopolis, IN).
- 34. Lee, H., and D.J. Bremer. 2006. Evaluation of cool-season turfgrass quality with multispectral radiometry. ASA Annual Meeting (Indianopolis, IN).
- 35. Frank, E.E., S.E. Travers, S.H. Hulbert, J.E. Leach, J. Bai, P.S. Schnable, M.D. Smith, D.J. Bremer and K.A. Garrett. 2006. Drought and rust effects on gene expression in the dominant plant species of tallgrass prairie, andropogon gerardii. Phytopathology 96:S37 (Supplement).
- 36. Zuk, A.J., D.J. Bremer, and J.D. Fry. 2005. Establishment of seeded zoysiagrass in a perennial ryegrass sward: Effects of soil surface irradiance and temperature. 10th International Turfgrass Research Conference (Llandudno, Wales).
- 37. Griffin, J.J., W.R. Reid, and D.J. Bremer. 2005. Turf species affect establishment and growth of *Cercis canadensis* and *Carya illinoensis*. Southern Nursery Association Annual Research Conference, August 2005.
- 38. Griffin, J.J., W.R. Reid, and D.J. Bremer. 2005. Turf species affect establishment and growth of *Cercis canadensis* and *Carya illinoensis*. ASHS Annual Conference, July 2005.
- 39. Bremer, D.J. 2004. Nitrous oxide fluxes in turfgrass: Effects of irrigation and nitrogen fertilization rates. ASA Annual Meeting (Seattle, WA).
- 40. Su, K., D.J. Bremer, S.J. Keeley, and J.D. Fry. 2004. High temperature and drought effects of a Texas bluegrass hybrid compared with Kentucky bluegrass and tall fescue. ASA Annual Meeting (Seattle, WA).
- 41. Griffin, J.J., W.R. Reid, and D.J. Bremer. 2004. Turfgrass affects first year growth and photosynthesis of redbuds (*Cercis canadensis* L.). p. 431-433. *In* B.L. James (ed) Proc. of Southern Nursery Assoc. Research Conf., Forty-Ninth Annual Report, Atlanta, GA.
- 42. Bremer, D.J. 2004. Nitrous oxide fluxes in turfgrass: Effects of irrigation and nitrogen fertilization rates. Kansas Statewide Epscor Conference Biosciences and the New Economy in Kansas. (Manhattan, KS).
- 43. Bremer, D.J., and J.M. Ham. 2003. Measurement and partitioning of in situ carbon fluxes in turfgrasses. ASA Annual Meeting (Denver, CO).
- 44. Keeley, S.J., R.W. Kraft, K. Su, and D.J. Bremer. 2003. Gradual conversion of perennial ryegrass fairway turf to Kentucky bluegrass. ASA Annual Meeting (Denver, CO).
- 45. Bremer, D.J. 2002. Measurement of soil water content inside microlysimeters and in adjacent soils using the dual-probe heat-pulse technique: A Field Study. ASA Annual Meeting (Indianapolis, IN).
- 46. Bremer, D.J., J.M. Ham, L.C. Johnson, and C.E. Owensby. 2000. Impact of forest expansion (*Juniperus virginiana*) on surface fluxes of CO₂ in the Great Plains. Ecol. Soc. Am. Annual Meeting. (Snowbird, UT).
- 47. Bremer, D.J., J.M. Ham, C.E. Owensby, and L.M. Auen. 1999. Effects of grazing by cattle on energy fluxes in a tallgrass prairie. ASA Annual Meeting (Salt Lake City, UT).
- 48. Bremer, D.J., and J.M. Ham. 1998. Effect of spring burning on the surface energy balance in a tallgrass prairie. ASA Annual Meeting (Baltimore, MD).
- 49. Bremer, D.J., J.M. Ham, C.E. Owensby, and A.K. Knapp. 1997. Effect of grazing on seasonal and annual soil respiration in a tallgrass prairie. ASA Annual Meeting (Anaheim, CA).
- 50. Ham, J.M., A.K. Knapp, and D.J. Bremer. 1997. Effect of fire on surface-layer fluxes of energy and carbon from grasslands. American Geophysical Union Annual Meetings. (San Francisco, CA).
- 51. Bremer, D.J., J.M. Ham, and C.E. Owensby. 1996. Effect of grazing on soil carbon dioxide flux in a tallgrass prairie. ASA Annual Meeting (Indianapolis, IN).

Professional presentations (continued)

- 52. Bremer, D.J., and J.M. Ham. 1995. Field scale measurements of net carbon exchange using Bowen ratio and conditional sampling. ASA Annual Meeting (St. Louis, MO).
- 53. Ham, J.M., J.M. Tarara, and D.J. Bremer. 1995. Control systems for measuring sap flow with compensating power techniques. ASA Annual Meeting (St. Louis, MO).
- 54. Bremer, D.J., J.M. Ham, and C.E. Owensby. 1994. Transpiration from a tallgrass prairie exposed to ambient and elevated levels of carbon dioxide. ASA Annual Meeting (Seattle, WA).
- 55. Bremer, D.J., A.J. Schlegel, and L.R. Stone. 1991. Optimum scheduling of limited irrigation for grain sorghum. ASA Annual Meeting (Denver, CO).

Thesis and Dissertation (authored and advised)

- 1. Domenghini, J.C., 2012. Water use and drought resistance of turfgrasses and ornamental landscape plant species. *Ph.D. Dissertation*, Kansas State Univ., Manhattan, KS.
- 2. Lewis, J.D. 2010. Carbon, nitrogen, and water fluxes from turfgrass ecosystems. *Ph.D. Dissertation*, Kansas State Univ., Manhattan, KS.
- 3. Markham III, J.W. 2010. Color and shading of containers affects root-zone temperatures and growth of nursery plants. *M.S. Thesis*, Kansas State Univ., Manhattan, KS.
- 4. Lee, H. 2008. Estimation of visual quality and canopy characteristics of turfgrass using spectral reflectance and digital imagery. *M.S. Thesis*, Kansas State Univ., Manhattan, KS.
- 5. Su, K. 2007. Performance of Texas bluegrass hybrids in the transition zone. *Ph.D. Dissertation*, Kansas State Univ., Manhattan, KS.
- 6. **Bremer, D.J.** 1998. Effect of burning and grazing on carbon and energy fluxes in a tallgrass prairie. *Ph.D. Dissertation*, Kansas State Univ., Manhattan, KS.
- 7. **Bremer, D.J.** 1994. Transpiration from a tallgrass prairie exposed to ambient and elevated levels of atmospheric carbon dioxide. *M.S. Thesis*, Kansas State Univ., Manhattan, KS.