

Steven J. Keeley

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Education

- Ph.D., Department of Horticulture, Colorado State University, Fort Collins, CO, 1996. Dissertation: *Drought performance of diverse Kentucky bluegrass cultivars.*
- M.S., Department of Crop and Soil Science, Michigan State University, East Lansing, MI, 1991. Thesis: *Postemergence crabgrass control in turfgrass with dithiopyr plus adjuvants.*
- B.S., Department of Horticulture, Colorado State University, Fort Collins, CO, 1984.

Professional Experience

- Department Head, Department of Horticulture and Natural Resources, Kansas State University, Manhattan, Kansas, August 2020 to present.
- Interim Department Head, Department of Horticulture and Natural Resources, Kansas State University, Manhattan, Kansas, October 2018 to July 2020.
- Professor (80% teaching, 20% research), Department of Horticulture and Natural Resources, Kansas State University, Manhattan, Kansas, 2012-present.
- Associate Professor (with tenure; 80% teaching, 20% research), Department of Horticulture, Forestry and Recreation Resources, Kansas State University, Manhattan, Kansas, 2004-2012.
- Assistant Professor (80% teaching, 20% research), Department of Horticulture, Forestry and Recreation Resources, Kansas State University, Manhattan, Kansas, 2000-2004.
- Assistant Professor (100% teaching), Department of Plant Sciences, Montana State University, Bozeman, Montana, January 2000 to May 2000.
- Assistant Professor and Extension Turfgrass Specialist (80% extension, 20% research), Department of Horticulture, Forestry and Recreation Resources, Kansas State University, Manhattan, Kansas, 1996-1999.
- Research Associate, Department of Horticulture, Colorado State University, Fort Collins, CO, 1991-1996.
- Graduate Research Assistant, Department of Crop and Soil Science, Michigan State University, East Lansing, MI, 1988-1990.
- Customer Service Representative, Lawn Doctor of Colorado Springs/Pueblo, Colorado Springs, Colorado, 1985-88.

Leadership and Service

- College of Agriculture Promotion and Tenure Committee, 2021-present.
- Business Committee on Planning, College of Agriculture, Kansas State University, 2020-21.
- Associate Editor, *Agronomy Journal*, 2017-20.
- Editorial Board, *NACTA Journal*, 2011- present.
- C-5 Div. Education Committee, Crop Science Society of America, 2004-2006 (Chair, 2006) and 2016-19.
- Senior Editor, *Crop, Forage and Turfgrass Management* (formerly *Applied Turfgrass Science*), 2011-16.
- Editorial Affairs, Policies, & Practices Committee, Crop Science Society of America, 2011-16.

- Associate Editor, Applied Turfgrass Science, 2009-2010.
- Chair, Undergraduate Curriculum Committee, Dept. of Horticulture and Natural Resources, Kansas State University, 2008-present (Member, 2001-present).
- Teaching Programs Task Force, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2010-2015.
- Student Recruitment Task Force, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2010-2015.
- HFRR Department Head (Vice-Warren) Search Committee, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2014.
- Chair, Turfgrass Extension/Research Position (Vice-St. John) Search Committee, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2012-2013.
- Executive Safety Committee, College of Agriculture, Kansas State University, 2002-2012.
- Vice-Kimmins Search Committee, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2010.
- Co-chair, College of Agriculture Academic Standards Committee, Kansas State University, 2005-2009 (Member, 2001-2009).
- Chair, Task force charged with increasing departmental unity/cohesiveness, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2008-2009.
- Chair, Task force charged with planning and implementing a \$30,000 classroom facilities improvement project, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2008-2009.
- Woody Ornamentals Research/Teaching Position Search Committee, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2008.
- Turfgrass Research Associate Search Committee, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2007.
- Turfgrass Extension Position Search Committee, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2004.
- Life-Long Learning Committee, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2002-2003.
- Turfgrass Research/Teaching Position Search Committee, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 2000.
- University Landscape Advisory Committee, Kansas State University, 1997-1999.
- College of Agriculture Pesticide Task Force, Kansas State University, 1997-1999.
- Eastern Kansas Center Coordinating Committee, Dept. of Horticulture, Forestry and Recreation Resources, Kansas State University, 1997-1999.

Teaching and Advising

Courses currently taught:

- HORT 515, Basic Turfgrass Culture (2 cr.; spring semesters)
- HORT 582, Foundations of Horticultural Pest Management (1 cr.; fall semesters)
- HORT 587, Turfgrass Disease Management (1 cr.; fall semesters)
- HORT 588, Turfgrass Weed Management (1 cr.; fall semesters)
- HORT 706, Turfgrass Science (3 cr.; spring semesters)

Other courses taught in previous years:

- HORT 190, Pre-internship in Horticulture (1 cr.; team taught annually, 2001-2013)
- HORT 201, Principles of Horticultural Science (4 cr.; fall semesters)
- HORT 405, Water Issues in the Lawn and Landscape (3 cr.; team taught annually as a distance education course, 2010-2016)
- HORT 516, Intensive Culture of Golf and Sports Turf (1 cr.; spring semesters)

- HORT 519, Turfgrass Pest Management (3 cr.; annually, 2001-2007)
- HORT 582, Horticultural Pest Management (3 cr.; annually, 2001-2007)
- HORT 583, Survey of Horticultural Ornamental and Food Crop Pests (1 cr.; 2008)

Undergraduate and graduate advising:

- From 2000-2021, advised up to 60 undergraduate horticulture students per semester, averaging ~30 advisees per semester.
- Advise the KSU student chapter of the Golf Course Superintendents Association of America.
- Advised and graduated three M.S. students and two Ph.D. students.
- Served on graduate committees of six M.S. student and nine Ph.D. students.

Refereed Publications (career, 40; bolded items indicate graduate advisee authorship)

Bach, A.P., Bremer, D.J., Lavis, C.C., and Keeley, S. J. 2022. Effects of drip irrigation and cultivation methods on establishment of seeded tall fescue. *Crop, Forage, and Turfgrass Mgmt.* <https://doi.org/10.1002/cft2.20154>

McFadden, D., J. Fry, S. Keeley, J. Hoyle, Z. Raudenbush. 2022. Establishment of Kentucky bluegrass and tall fescue seeded after herbicide application. *Crop, Forage, and Turfgrass Mgmt.* <https://doi.org/10.1002/cft2.20151>

Bach, A.P., Bremer, D.J., Lavis, C.C., and Keeley, S. J. 2021. Establishing seeded tall fescue with covers and drip irrigation methods. *Int. Turfgrass Soc. Res. J.*, 1–9. <https://doi.org/10.1002/its2.95>

Raudenbush, Z., Keeley, S., Thompson, C., and Jugulam, M. 2021. Dose responses of silvery-thread moss (*Bryum argenteum*) to carfentrazone-ethyl. *Weed Tech.*, 1-24, doi:10.1017/wet.2021.42

Fry, J., M. Xiang, S. Keeley, and M. Hong. 2021. Evaluation of turfgrass establishment knowledge gained from an undergraduate horticulture course. *NACTA J.* 65:46-49.

Hong, M., D.J. Bremer, and S.J. Keeley. 2021. Minimum water requirements of cool-season turfgrasses for survival and recovery after prolonged drought. *Crop Sci.* 61:2963-2977. <https://doi.org/10.1002/esc2.20393>

Raudenbush Z., Greenwood J.L., McLetchie D.N., Eppley S.M., Keeley S.J., Castetter R.C., Stark L.R. 2018. Divergence in Life-History and Developmental Traits in Silvery-Thread Moss (*Bryum argenteum* Hedw.) Genotypes between Golf Course Putting Greens and Native Habitats. *Weed Sci.* 66:642–650. doi: 10.1017/wsc.2018.37

Hoyle, Jared A., Ross C. Braun, Jacob A. Reeves, Steven J. Keeley, and Dale J. Bremer. 2018. Mowing height and cultivation effects on tall fescue conversion to buffalograss. *Crop, Forage, and Turfgrass Mgmt.* 4:1-3.

Raudenbush, Zane and Steven J. Keeley. 2017. Cultivation reduces infestation of silvery-thread moss in a creeping bentgrass putting green. *Int. Turfgrass Soc. Res. J.* 13:1-6.

Alderman, Evan J., Jared Hoyle, Steven J. Keeley, and Jack D. Fry. 2017. Buffalograss divot recovery as affected by nitrogen source and rate. *Crop, Forage, and Turfgrass Mgmt.* 3:1-6.

Raudenbush, Z., S. Keeley and M. Basel. 2016. Effect of irrigation water pH and acidifying-source on silvery-thread moss (*Bryum argenteum* Hedw.) establishment. *The Bryologist* 119:1-7.

Raudenbush, Z. and S. Keeley. 2015. Effect of nitrogen source and spray volume on the establishment and colonization of silvery-thread moss (*Bryum argenteum* Hedw.) in putting greens. *Crop, Forage, and Turfgrass Mgmt.* doi: 10.2134/cftm2015.0145

Raudenbush, Z., S.J. Keeley, and L. Stark. 2015. A Review: Establishment, dispersal, and management of silvery-thread moss (*Bryum argenteum* Hedw.) in putting greens. *Crop, Forage, and Turfgrass Mgmt.* doi: 10.2134/cftm2014.0094

- Bremer, D.J., S.J. Keeley, A. Jager. 2015. Effects of home value, home age, and lot size on lawn-watering perceptions and behaviors of residential homeowners. *HortTech*. 25:90-97.
- Goldsby, A.L., D.J. Bremer, J.D. Fry, and S.J. Keeley. 2015. Response and recovery characteristics of Kentucky bluegrass cultivars to extended drought. *Applied Turfgrass Sci*. doi:10.2134/cftm2014.0087.
- Raudenbush, Z. and S.J. Keeley. 2014. Springtime dandelion (*Taraxacum officinale*) control with seven postemergence herbicides applied at three anthesis stages. *HortSci*. 49(9):1212-1216.**
- Domenghini, J., D. Bremer, S. Keeley, J. Fry, C. Lavis, and S. Thien. 2014. Assessing student learning with surveys and pre-/post-test in an online course. *Nat. Sci. Educ*. 43: 1: 109-116. doi:10.4195/nse2014.03.0008.
- Raudenbush, Z. and S.J. Keeley. 2014. Volatility of broadleaf weed herbicides when applied to turfgrass. *Applied Turfgrass Sci*. 11(1). doi:10.2134/ATS-2013-0030-RS.**
- Bremer, D.J., S.J. Keeley, A. Jager, and J.D. Fry. 2013. Lawn-watering perceptions and behaviors of residential homeowners in three Kansas [USA] cities: Implications for water quantity and quality. *Int. Turfgrass Soc. Res. J*. 12:23-29.
- Bremer, D.J., S.J. Keeley, A. Jager, J.D. Fry, and C. Lavis. 2012. In-ground irrigation systems affect lawn-watering behaviors of residential homeowners. *HortTech*. 22:651-658.
- Lewis, J., 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*. 52:1881-1890.
- Peterson, Kenton W. and Steven J. Keeley. 2012. A comparison of web-based and traditional instruction for teaching turfgrass identification. *NACTA J*. 56:17-22.
- Bremer, D.J., H. Lee, K. Su, and S.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.
- Bremer, D.J., H. Lee, K. Su, and S.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.
- Lee, H., D.J. Bremer, K. Su, and S.J. Keeley. 2011. Relationships between normalized difference vegetation index and visual quality in turfgrasses: Effects of mowing height. *Crop Sci*. 51:323-332.
- Goldsby, Anthony L., and Steven J. Keeley. 2009. Nitrogen source and timing effect on non-structural carbohydrate status of 'Midlawn' bermudagrass. *Int. Turfgrass Soc. Res. J*. 11:1001-1009.**
- St. John, Rodney, Jack Fry, Dale Bremer, and Steve Keeley. 2009. Establishment rate and lateral spread of *Festuca arundinacea* cultivars. *Int. Turfgrass Soc. Res. J*. 11:481-487.
- 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. Turfgrass Soc. Res. J*. 11:871-882.**
- 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.**
- 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.**
- 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. Online. *Applied Turfgrass Science* doi:10.1094/ATS-2006-0808-02-RS.
- Keeley, S.J. and H. Zhou. 2005. Preemergence herbicide and seeding method effects on seedling growth of Kentucky bluegrass. *Weed Tech*. 19(1):43-46.
- Kraft, R.W. and S.J. Keeley. 2005. Evaluation of improved *Poa pratensis* cultivars for transition zone fairway use. *Int. Turfgrass Soc. Res. J*. 10:368-372.**

- Fry, J.D., T.A. McClellan, and S.J. Keeley. 2005. Ball mark repair and creeping bentgrass recovery. Online. Applied Turfgrass Science doi:10.1094/ATS-2005-0801-01-RS.
- Kraft, R.W., S.J. Keeley, and K. Su. 2004. Conversion of fairway-height perennial ryegrass turf to Kentucky bluegrass without non-selective herbicides. Agron. J. 96:576-579.**
- Keeley, S.J. and A.J. Koski. 2002. Root distribution and ET as related to drought avoidance in *Poa pratensis*. Science and Golf IV:555-563.
- Fry, J.D., S.J. Keeley and J. Lee. 2002. Sulphur level and timing effects on *Agrostis palustris* injury and soil pH. Science and Golf IV:676-681.
- Keeley, S.J. and A.J. Koski. 2001. Dehydration avoidance of diverse *Poa pratensis* cultivars and cultivar groups in a semi-arid climate. Int. Turfgrass Soc. Res. J. 9:311-316.
- Gaussoin, R., D. Minner, S. Keeley, and M. Vaitkus. 2001. Annual seeding of *Cynodon dactylon* [L.] Pers. for improved performance of heavily trafficked athletic fields in temperate climates. Int. Turfgrass Soc. Res. J. 9:865-869.
- Keeley, S.J. and A.J. Koski. 1997. Measuring turfgrass evapotranspiration rates by time-domain reflectometry: a field assessment. Int. Turfgrass Soc. Res. J. 8(2):1280-1290.
- Keeley, S.J., B.E. Branham and D. Penner. 1997. Adjuvant enhancement of large crabgrass (*Digitaria sanguinalis*) control with dithiopyr. Weed Sci. 45:205-211.

Books

- Bauernfeind, Bob, Raymond Cloyd, Steve Keeley, Megan Kennelly, Charles Lee, and Ward Upham. 2013. *Turf Pest Control*. Manhattan, Kansas: Kansas State University Agricultural Experiment Station and Cooperative Extension Service. 64 pp.
- Bauernfeind, Robert F., Steve Keeley, Dennis Kuhlman, Charles Lee, and Ned Tisserat. 1998. *Turf Pest Control*. Manhattan, Kansas: Kansas State University Agricultural Experiment Station and Cooperative Extension Service. 67 pp.

Professional/Trade Journal Articles

- Keeley, Steve. 2017. Who are you mentoring? Sage advice from some great mentors. Turf News – The KTF Newsletter. July.
- Keeley, Steve. 2016. Fewer students means fewer potential employees for you... What to do? Turf News – The KTF Newsletter. July.
- Raudenbush, Zane and Steve Keeley. 2015. Nitrogen fertilization and silvery-thread moss: Figuring out N's contributions to STM success. Golfdom 71(10):52-57.
- Raudenbush, Z., S. Keeley, and L. Stark. 2015. Managing silvery-thread moss in golf course greens: Best management practices for silvery-thread moss often conflict with cultural practices used on greens. Golf Course Management 83(10):72-77.
- Keeley, Steve. 2015. The Glory of Real Grass, and “Fundamentals First”—Midsummer Turf Musings from K-State. Turf News – The KTF Newsletter. July.
- Goldsby, Tony, Dale Bremer, Jack Fry, and Steve Keeley. 2014. Response and recovery of Kentucky bluegrass cultivars to severe drought with no irrigation. SportsTurf 30(6):16.
- Bremer, D., S. Keeley, J. Fry, and J. Lewis. 2014. Which Kentucky bluegrass cultivars perform best with less water? Golf Course Management 82(5):76-80.
- Keeley, Steve. 2014. When controlling dandelions in spring, application timing matters. Turf News – The KTF Newsletter. April.
- Keeley, Steve and Zane Raudenbush. 2014. Messin' with moss. Turf News – The KTF Newsletter. January.
- Raudenbush, Z. and S.J. Keeley. 2013. Nitrogen source affects silvery-thread moss. Golf Course Management 81(12):92.

- Keeley, Steve. 2013. Getting in rhythm: Pros and cons of allowing turf to go dormant during summer. Turf News – The KTF Newsletter. July.
- Bremer, Dale, Jason Lewis, Steve Keeley, and Jack Fry. 2012. Different Kentucky bluegrass cultivars, same water requirements? Turf News – The KTF Newsletter. April.
- Keeley, Steve. 2011. Don't jump to conclusions, or, why field studies must be repeated! Turf News – The KTF Newsletter. July.
- Keeley, Steve. 2010. Synthetic turf: The good, the bad, and the misunderstood. Turf News – The KTF Newsletter. April.
- St. John, Rodney, Jack Fry, Dale Bremer and Steve Keeley. 2009. Establishment rate and lateral spread of tall fescue cultivars. Golf Course Management. Vol. 77, No. 2 (Feb.), p. 113-118.
- Bremer, Dale, Steve Keeley, Jack Fry, and Jason Lewis. 2008. Comparative irrigation requirements: A close look at 30 Kentucky bluegrass cultivars under a protective rainout facility in the transition zone. TurfNews [TPI]. May/June. 31(3): 56-60.
- Bremer, Dale J., Kemin Su, Steven J. Keeley, and Jack D. Fry. 2008. Hybrid bluegrass v. Kentucky blue and tall fescue in the transition zone. SportsTurf. September. 24(9):16-20.
- Keeley, Steve, Dale Bremer, and Kemin 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. 21-24.
- Keeley, Steve and Jack Fry. 2008. New Sports Turf curriculum at K-State. Turf News – The KTF Newsletter. April.
- Bremer, Dale; Fry, Jack; Keeley, Steve. 2007. Comparative irrigation requirements of 30 cultivars of Kentucky bluegrasses under a large rainout facility in the transition zone. TurfNews [TPI]. May/June. 30(3): p. 50-52.
- Fry, Jack D., Ty A. McClellan, and Steven J. Keeley. 2007. Reparatie pitchmarks bevordert snel herstel: Leer golfers hun pitchforks goed te gebruiken ([Repair pitchmarks promotes fast convalescence: Teach golfers how to use their pitchforks well]). Greenkeeper (The Netherlands). Jaargang 18. 18(3): p. 46-49.
- Keeley, Steve. 2007. Why my friend Griswold doesn't like turf, and what we can learn from him. Turf News – The KTF Newsletter. July.
- Bremer, Dale J., K. Su, Steven J. Keeley, and Jack D. Fry. 2006. Comparison of performance of two hybrid bluegrass with Kentucky bluegrass and tall fescue. Golf Course Management. Vol. 74, No. 12 (Dec.), p. 78-82.
- Fry, Jack D., Ty A. McClellan, and Steven J. Keeley. 2006. Proper ball mark repair cuts turf recovery time. Golf Course Management. Vol. 74, No. 2 (Feb.), p. 97-100.
- Keeley, Steve. 2006. Arnold Schwarzenegger, pumping iron, and turf. Turf News – The KTF Newsletter. April.
- Keeley, Steven J., Robb W. Kraft, and Kemin Su. 2006. Converting perennial ryegrass to Kentucky bluegrass without non-selective herbicides. Golf Course Management. Vol. 74, No. 2 (Feb.), p. 101-104.
- Keeley, Steve. 2005. Charting conversion: Converting perennial ryegrass fairways to Kentucky bluegrass without non-selective herbicides. Grounds Maintenance. Vol. 40, No. 9 (Sept.), p. G2-G7.
- Keeley, Steve. 2005. Banking on summer survival of bentgrass greens. Turf News – The KTF Newsletter. May.
- Keeley, Steve. 2004. Fall turf care and other random thoughts. Turf News – The KTF Newsletter. October.
- Fry, Jack, Steve Keeley, and Ty McClellan. 2004. Ball mark repair methods and bentgrass recovery. Turf News – The KTF Newsletter. April.
- Keeley, Steve. 2004. Phosphorus – How low, or high, can you go? Turf News – The KTF Newsletter. April.
- Keeley, Steve. 2003. Diagnosing and dealing with iron chlorosis in turfgrass. Turf News – The KTF Newsletter. July.

- Fry, J., S. Keeley, and J. Lee. 2002. Sulfur may not reduce pH on some greens. *Turfgrass Trends*. Vol. 11, No. 11 (Nov.), p. T10-T12.
- Keeley, Steve. 2002. Want an easier job? Be a turf manager in Scotland. *Turf News – The KTF Newsletter*. October.
- Keeley, Steve. 2002. Bentgrasses: Then and now. *Turf News – The KTF Newsletter*. April.
- Keeley, Steve. 2000. Banking on the fundamentals of summer survival. *Turf News – The KTF Newsletter*. September.
- Keeley, Steve. 2000. Some thoughts on blending turfgrasses. *Turf News – The KTF Newsletter*. September.
- Keeley, Steve. 1999. What about bentgrass fairways?. *Turf News – The KTF Newsletter*. September.
- Keeley, Steve. 1999. Before seeding this fall ask: Is crabgrass killer still active? *Golf Course Management*. Vol. 67, No. 8 (August), p. 49-52.
- Keeley, Steve. 1999. Mild winter? Not according to bermudagrass. *Turf News – The KTF Newsletter*. June.
- Keeley, Steve. 1999. Managing turf in shade. *Turf News – The KTF Newsletter*. April.
- Keeley, Steve. 1999. Weed control strategies for cool-season athletic turf: Let's be cultured about it. *Turf News – The KTF Newsletter*. January.
- Keeley, Steve. 1998. I'm gonna wash that moss right out of my turf. *Turf News – The KTF Newsletter*. April.
- Keeley, Steve. 1998. Spring core-aeration and power raking. *Turf News – The KTF Newsletter*. April.
- Keeley, Steve. 1998. Sand topdressing: Avoiding future headaches. *Turf News – The KTF Newsletter*. April.
- Keeley, Steve. 1998. Preemergence herbicides and September overseeding: Can you have it all? *Turf News – The KTF Newsletter*. January.
- Keeley, Steve. 1997. Surfin' Turf: The Internet and its application for you. *Turf News – The KTF Newsletter*. October.
- Keeley, Steve. 1997. Should I mow low during spring and fall?. *Turf News – The KTF Newsletter*. April.
- Keeley, Steve. 1997. Kentucky bluegrasses for Kansas golf course fairways. *Turf News – The KTF Newsletter*. January.

Extension Publications

New:

- Keeley, Steve and Matthew Fagerness. 2001. Bermudagrass Football Fields. Kansas State University, MF-2451.
- Keeley, Steve. 1999. Weed Control in Home Lawns. Kansas State University, MF-2385.
- Tisserat, Ned and Steve Keeley. 1999. A Diagnostic Guide for Troubleshooting Kansas Lawn Problems, Part I: Home Lawns, Athletic Fields, and General Turf. Online. Kansas State University. http://www.oznet.ksu.edu/dp_hfrr/turf/diagnostic%20guide.htm.
- Keeley, Steve. 1998. Fertilizing Kansas Lawns. Kansas State University, MF-2324.
- Keeley, Steve and David Whitney. 1998. A Guide to Turfgrass Nutrient Recommendations. Kansas State University, MF-2311.
- Keeley, Steve and Jack Fry. 1997. Kentucky Bluegrass Lawns. Kansas State University, MF-2262.
- Keeley, Steve. 1997. Master Gardener Basic Training: Home Lawns (Video, 100 min.). Kansas State University, SV-414.

Revised:

- Keeley, Steve. 1999. Managing Fescue Football Fields. Kansas State University, MF-803.
- Keeley, Steve. 1998. Tall Fescue Lawns. Kansas State University, MF-736.
- Keeley, Steve. 1997. Buffalograss Lawns. Kansas State University, MF-658.

- Keeley, Steve. 1997. Bermudagrass Lawns. Kansas State University, MF-1112.
- Keeley, Steve. 1997. Mowing Your Lawn. Kansas State University, MF-1155.
- Keeley, Steve. 1997. Watering Your Lawn. Kansas State University, MF-2059.
- Keeley, Steve and Elaine Mohr. 1996. Maintaining Good Lawns with Less Water. Kansas State University, MF-2068.

Proceedings

- Keeley, Steve. 1999. Weed control strategies for athletic field managers. Proceedings of the 69th Annual Michigan Turfgrass Conference. Vol. 28, p. 164-165.
- Keeley, S.J. and B.E. Branham. 1991. Postemergence crabgrass control with new herbicides. Proceedings of the 61st Annual Michigan Turfgrass Conference. Vol. 20, p. 122.

Abstracts and Scientific Reports in Non-Refereed Publications

- Keeley, S., J. Fry, and M. Xiang. 2018. Career trajectory and satisfaction of Kansas State University golf/turf graduates from 1978-2017. ASA, CSSA and SSSA International Annual Meetings.
- Fry, J., S. Keeley, and M. Xiang. 2018. Evaluation of turfgrass management gained in an undergraduate horticulture course by implementation and evaluation of a first-week laboratory exercise. ASA, CSSA and SSSA International Annual Meetings. p. 113274.
- Alderman, E.; Hoyle, J.; Fry, J.; and Keeley, S. 2016. Evaluating the Effects of Simulated Golf Cart Traffic on Dormant Buffalograss and Turfgrass Colorants. Kansas Agricultural Experiment Station Research Reports: Vol. 2: Iss. 4. <http://dx.doi.org/10.4148/2378-5977.1214>
- Keeley, Steven J. and Zane Raudenbush. 2016. Construction of an on-campus putting green enhances student learning in golf course management. *ASA, CSSA and SSSA International Annual Meetings*. p. 102736.
- Reeves, Jacob, Jared A. Hoyle, Steven J. Keeley, and Dale J. Bremer. 2016. Glyphosate application timing affects tall fescue conversion to 'Sharp's Improved II' buffalograss. *ASA, CSSA and SSSA International Annual Meetings*. p. 99780.
- Reeves, J.; Hoyle, J.; Bremer, D.; and Keeley, S. 2016. Influence of Glyphosate Timings on Conversion of Golf Course Rough from Tall Fescue to 'Sharps Improved II' Buffalograss. Kansas Agricultural Experiment Station Research Reports: Vol. 2: Iss. 4. <http://dx.doi.org/10.4148/2378-5977.1212>
- Stark, Lloyd, Steve Keeley and Zane Raudenbush. 2016. Characterizing growth and life history of silvery-thread moss in cool-season putting greens: Assessing vulnerability to stress in the life cycle. *USGA Turfgrass and Environmental Research: 2016 Research Summaries*, pp. 204-206.
- Raudenbush, Zane, Steve Keeley, and Mithila Jugulam. 2015. Dose responses of silvery-thread moss to carfentrazone-ethyl. *K-State Turfgrass Research 2015*. p. 1-4.
- Bremer, Dale J., Deon van der Merwe, Jack Fry, Steven J. Keeley, Jared A. Hoyle, and Megan M. Kennelly. 2015. Evaluating small unmanned aerial systems for detecting turfgrass stress with an emphasis on drought. *ASA, CSSA and SSSA International Annual Meetings*. p. 92663.
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Grants Funded (career, \$1,168,191)

- S. Keeley. 2018. NCERA Organic Weed Control Trial. Illinois Turfgrass Foundation. **\$750.**
- S. Keeley and J. Fry. 2017-2018. Career progression and satisfaction of Kansas State University golf course graduates from 1978-2017. College of Agriculture, Kansas State University. **\$2000.**
- S. Keeley. 2017. Turfgrass Research. Kansas Turf Foundation. **\$5500.**
- Stark, L, S. Keeley, and Z. Raudenbush. 2015-2017. Characterizing growth and life history of silvery-thread moss in cool-season putting greens: assessing vulnerability to stress in the life cycle. United States Golf Association. **\$45,000.**
- D. Bremer, D. van der Merwe, J. Fry, S. Keeley, J. Hoyle, M. Kennelly. 2014-2018. Evaluating small unmanned aerial systems for detecting turfgrass stress with an emphasis on drought. United States Golf Association and Kansas Turfgrass Foundation. **\$64,000.**
- S. Keeley, J. Hoyle and Z. Raudenbush. 2014. Broadleaf and annual grass herbicide trials. Bayer Environmental. **\$10,500.**
- S. Keeley. 2012-2015. Silvery thread moss control in creeping bentgrass. Kansas Turf Foundation. **\$30,000.**
- S. Keeley and Z. Raudenbush. 2013. Broadleaf and annual grass herbicide trials. Bayer Environmental. **\$4000.**
- S. Keeley, J. Fry and Z. Raudenbush. 2012. Turfgrass equipment and supplies for outdoor teaching laboratory. College of Agriculture, Kansas State University. **\$3841.**
- S. Keeley and Z. Raudenbush. 2012. Goosegrass control with Specticle. Bayer Environmental. **\$2500.**
- S. Keeley. 2011. Broadleaf weed control efficacy and turfgrass phytotoxicity of chelated iron. The Scotts Company. **\$7500.**
- S. Keeley and Z. Raudenbush. 2011. Herbicide research with Imprelis. DuPont. **\$3500.**
- S. Keeley. 2009-2011. Efficacy and volatility of spring-applied herbicides for broadleaf weed control in turfgrass. Kansas Turf Foundation. **\$21,000.**
- D. Bremer, J. Ham, S. Keeley, J. Fry, C. Lavis, L. Moley, and R. St. John. 2008-2011. Modifying Homeowner's Lawn-Irrigation Behavior to Conserve Water and Improve Water Quality in Urbanizing Watersheds. USDA. **\$600,000.**
- S. Keeley and J. Fry. 2010. Turfgrass equipment for outdoor teaching laboratory. College of Agriculture, Kansas State University. **\$8100.**
- S. Keeley, J. Fry, and D. Bremer. 2008. An Undergraduate Certificate Program in Turfgrass Management. Div. of Continuing Education, Kansas State University. **\$14,639.**
- D. Bremer, J. Fry, and S. Keeley. 2006-2008. Comparative Irrigation Requirements of 30 Cultivars of Kentucky Bluegrasses under a Large Rainout Facility in the Transition Zone. United States Golf Association, Turf Producers International, and Kansas Turf Foundation. **\$66,058.**
- S. Keeley, J. Fry, and D. Bremer. 2005-2007. Nitrogen Source and Timing Effect on

- Carbohydrate Status of Cool- and Warm-Season Turfgrasses. Pursell Technologies, Inc. and Kansas Turf Foundation. **\$18,000.**
- 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.**
- S. Keeley and J. Fry. 2002-2006. Buffalograss Cultivar Evaluations. USDA/National Turfgrass Federation. **\$8000.**
- S. Keeley. 2003. Kentucky Bluegrass Cultivars as Monostands and in Mixtures with Perennial Ryegrass for Golf Course Fairway Turf: Performance and Cultivar Effects. Kansas Turfgrass Foundation. **\$5500.**
- J. Fry and S. Keeley. 2000-2003. Converting Transition Zone Fairways from Perennial Ryegrass to Kentucky Bluegrass or Seeded Zoysiagrass. Golf Course Superintendents Association of America and Kansas Turfgrass Foundation. **\$60,000.**
- S. Keeley. 2000. Turfgrass Management Studies for the Northern Rocky Mountain Region. Golf Course Superintendents Association of America and Peaks and Prairies Golf Course Superintendents Association. **\$45,000.**
- S. Keeley. 2000. Kentucky Bluegrass Cultivar Trial at Montana State University. National Turfgrass Federation (USDA). **\$12,000.**
- S. Keeley. 2000. Turfgrass Research Support at Montana State University. In-kind donations of fertilizer, fungicide, a walk-behind greensmower, and a triplex greensmower from various companies. **\$7300.**
- S. Keeley. 1998-1999. Seeded Bermudagrasses for Athletic Field Turf. Seeds West. **\$5500.**
- S. Keeley. 1999. Dimension Herbicide Investigations. Rohm and Haas. **\$2000.**
- S. Keeley. 1999. Team Pro Herbicide Investigations. Dow Agrosiences. **\$2000.**
- J. Fry and S. Keeley. 1998-2004. Turfgrass Variety Trials. National Turfgrass Federation (USDA). **\$30,000.**
- N. Tisserat, J. Fry, S. Keeley, and B. Huang. 1998-2000. The Biology and Management of Spring Dead Spot in Bermudagrass. United States Golf Association. **\$66,000.**
- N. Tisserat, J. Fry, S. Keeley, and B. Huang. 1997-2002. Turfgrass Management Studies. Kansas Turfgrass Foundation. **\$15,000.**

Awards and Honors

- College of Agriculture Faculty of the Semester, 2015.
- Crop Science Teaching Award, Crop Science Society of America, 2014.
- Kansas State University Academy of Fellows, 2013.
- Teacher Fellow, National Association of Colleges and Teachers of Agriculture, 2011.
- Nominated for Presidential Award for Excellence in Undergraduate Teaching, 2011.
- Nominated (along with Drs. Bremer, Lavis, and Fry, and Cody Domenghini) for Team Award for development of online course (HORT 405), 2011 KSRE Annual Conference.
- Gamma Sigma Delta College of Agriculture Outstanding Teaching Award, Kansas State University, 2009.
- Nominated for College of Agriculture Faculty of the Semester in Fall, 2008, Spring, 2009, and Spring, 2011 by the students of the Horticulture Club, and in Spring, 2011 by the K-State Student Chapter of the Golf Course Superintendents of America.
- Crop Science Society of America Editor's Citation for Excellence in Manuscript Review, 2004.
- Kansas Turfgrass Foundation Award of Appreciation, 1999.
- Golf Course Superintendents Association of America Watson Fellowship, 1994 and 1995.
- Second Place, C-5 (Turf) Div. Graduate Student Paper Competition, ASA-CSSA-SSSA Annual Meetings, San Antonio, TX, 1990.

- Crop and Soil Science Departmental Fellowship, Michigan State University, 1988-90.
- Graduated with distinction, Colorado State University, 1984.

Professional Affiliations

American Society of Agronomy, Crop Science Society of America, North American College Teachers of Agriculture, Kansas Turfgrass Foundation, Kansas Golf Course Superintendents Association, Golf Course Superintendents Association of America, Pi Alpha Xi (Horticulture Honor Society), Gamma Sigma Delta (Honor Society of Agriculture)