

PROFESSOR AND EXTENSION SPECIALIST

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EDUCATION**DOCTOR OF PHILOSOPHY, 2000**

University of Connecticut - Storrs, Connecticut
 Department of Plant Science: Agronomy, Turfgrass Science emphasis

MASTER OF SCIENCE, 1996

University of Connecticut - Storrs, Connecticut
 Department of Natural Resource Management and Engineering: Hydrology

BACHELOR OF SCIENCE, 1991

Texas A&M University - College Station, Texas
 Interdisciplinary Degree: Natural Resource Conservation, Soil Science emphasis

EXPERIENCE

Director, Center for Water Efficient Landscaping. Utah State University.	2020-present
Ecology Center Associate. Utah State University Ecology Center.	2017-present
Professor/Extension Water Conservation and Turfgrass Specialist Dept. of Plants, Soils and Climate. Utah State University.	2014-present
Director, Center for Water Efficient Landscaping. Utah State University.	2011-2015
Associate Professor/Extension Water Conservation and Turfgrass Specialist Dept. of Plants, Soils and Climate. Utah State University.	7/07-7/14
Assistant Professor/Extension Water Conservation and Turfgrass Specialist Dept. of Plants, Soils and Climate. Utah State University.	1/01-7/07
Research Assistant/Teaching Assistant Dept. of Plant Science. University of Connecticut.	5/94-12/00
Research Assistant Dept. of Natural Resource Man. and Engineering. University of Connecticut.	7/91-5/94

AWARDS AND RECOGNITION

American Society of Horticultural Science Extension Division Material Award. Awarded to Adrea Wheaton, Larry Rupp, David T. Anderson, Paul G. Johnson, Roger Kjelgren, **Kelly Kopp**, Anne M. Spranger, and William A. Varga for [Combinations for Conservation: Recommended plant groupings for low-water landscapes](#). Utah State University Extension. Logan, UT. 2018.

Utah Association of County Agricultural Agents Best Fact Sheet Award. Awarded to a Utah State University Extension employee or team of employees who produce the best fact sheet (2 pages) of the year as determined by the Utah Association of County Agricultural Agents. Awarded to Taun Beddes, Michael Caron, **Kelly Kopp**, and Corey Ransom for [Prostrate and spotted spurge management in home landscapes](#). USU Extension Publication No. Horticulture/Landscape/2017-02pr. 2018.

Utah Association of County Agricultural Agents Best Publication Award. Awarded to a Utah State University Extension employee or team of employees who produce the best publication (covering one or more subjects, more extensive than a fact sheet) of the year as determined by the Utah Association of County Agricultural Agents. Awarded to Taun Beddes, Michael Caron, James Barnhill, and **Kelly Kopp** for [Suppression and control of field bindweed — \(perennial morning glory\) in residential areas](#). USU Extension Publication No. Horticulture/Weeds/2017-01pr. 2018.

USU Extension Innovator Award. Awarded to a Utah State University Extension employee who embraces innovation and technology. The selected individual utilizes technology to better serve internal and external clientele and has played an integral part of a team or pursued innovation individually. 2015 (inaugural award).

Western Extension Directors Association Award of Excellence. Awarded to the Center for Water Efficient Landscaping (**Kelly Kopp**, Joanna Endter-Wada, Paul Johnson, Roger Kjelgren, and Larry Rupp) in recognition of “Extension outreach education programming that has achieved outstanding accomplishments, results, and impacts in addressing contemporary issues”. 2014.

Innovative Program Award. Utah State University Extension Specialist’s Association. “In recognition of the recipient’s development of non-traditional program delivery methods and non-traditional resources in support of Cooperative Extension role.” 2014.

Recognized by Golf Course Industry magazine as one of the “[Not So Dirty Dozen](#).” One of a dozen academicians of a “new generation of scientific wunderkind getting ready to set the (turfgrass research) standards,” and, “...a new crop of talented young agronomists who will soon be changing our world”. Golf Course Industry magazine provides new ideas, innovative techniques, practical tips, and proven research information across print, digital and social media platforms. It is considered the number-one independent media source in the golf turf market. 2013.

Nation's Top Trendsetter Award by Public Works Magazine. Awarded to “professionals who stand out among their peers by making a national impact on the public works sector, thereby influencing the public’s quality of life on a daily basis”. Public Works magazine is the only magazine focused solely on the information needs of city, county, and state employees who plan, build, operate, and maintain their community’s infrastructure assets. Awarded to Fred Liljegren, Mike Stuver, Larry Rupp, Roger Kjelgren, and **Kelly Kopp**. 2007.

United States Secretary of the Interior Cooperative Conservation Award. Awarded in recognition of accomplishments to research, educate, and facilitate water conservation techniques in the urban landscapes of the western United States. Awarded to Fred Liljegren, Mike Stuver, Larry Rupp, Roger Kjelgren, and **Kelly Kopp**. 2006.

Extension Vice President’s Award for Excellence. Presented to the Utah State University Extension Water Issues Team (Teresa Cerny, Bob Hill, Rich Koenig, **Kelly Kopp**, and Nancy Mesner). 2003.

Outstanding New Extension Specialist Award, Utah State University Extension Specialist’s Association. “In recognition of the development of effective programs as well as positive interactions within recipient’s academic unit and with county-based faculty.” 2003.

GRANTS AND FUNDING

GRAND TOTAL, 2001-2019: \$8,499,612 (\$3,552,975 under my administration)

External Extension Funding

Metropolitan Water District of Salt Lake and Sandy landscape Water Check program. 2019. **Kopp (PI)**. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$92,294 (*\$92,294*).

Metropolitan Water District of Salt Lake and Sandy landscape Water Check program. 2018. **Kopp (PI)**. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$59,754 (*\$59,754*).

Water Check communications and application modifications. 2017. **Kopp (PI)**. Salt Lake City Department of Public Utilities. Salt Lake City, UT. Amount: \$45,513 (*\$45,513*).

Metropolitan Water District of Salt Lake and Sandy landscape Water Check program. 2017. **Kopp (PI)**. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$59,816 (*\$59,816*).

Metropolitan Water District of Salt Lake and Sandy landscape Water Check program. 2016. **Kopp (PI)**. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$60,196 (*\$60,196*).

Jordan Valley Water Conservancy District Water Check program. 2016. **Kopp (PI)**. Jordan Valley Water Conservancy District. West Jordan, UT. Amount: \$34,863 (*\$34,863*).

Metropolitan Water District of Salt Lake and Sandy landscape Water Check program. 2015. **Kopp (PI)**. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$59,863 (\$59,863).

Central Utah Water Conservancy District Landscape Water Check program. 2015. **Kopp (PI)**. Central Utah Water Conservancy District. Orem, UT. Amount: \$104,282 (\$104,282).

Water Conservation for Lawn and Landscape Community of Practice support funds. 2014-2015. **Kopp (PI)**, Rupp and Buffler. The Board of Regents of the University of Nebraska, Lincoln, NE. Amount: \$10,000 (\$5000).

Metropolitan Water District of Salt Lake and Sandy landscape Water Check program. 2014. **Kopp (PI)**. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$49,980 (\$49,980).

Central Utah Water Conservancy District Landscape Water Check program. 2014. **Kopp (PI)**. Central Utah Water Conservancy District. Orem, UT. Amount: \$106,282 (\$106,282).

Water Conservation for Lawn and Landscape Community of Practice support funds. 2013-2014. **Kopp (PI)**, Rupp and Buffler. The Board of Regents of the University of Nebraska, Lincoln, NE. Amount: \$10,000 (\$5000).

Landscape Water Check program. 2013. **Kopp (PI)** and Endter-Wada. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$58,568 (\$58,568).

Landscape Water Check program. 2013. **Kopp (PI)**. Central Utah Water Conservancy District. Orem, UT. Amount: \$127,687 (\$127,687).

Landscape Water Check program. 2012. **Kopp (PI)** and Kjelgren. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$46,505 (\$34,879)

Landscape Water Check program. 2012. **Kopp (PI)** and Kjelgren. Central Utah Water Conservancy District. Orem, UT. Amount: \$64,042 (\$48,032).

Landscape Water Check program. 2011. **Kopp (PI)** and Kjelgren. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$62,717 (\$37,466).

Landscape Water Check program. 2011. **Kopp (PI)** and Kjelgren. Central Utah Water Conservancy District. Orem, UT. Amount: \$94,025 (\$70,519).

Landscape Water Check program. 2011. **Kopp (PI)** and Kjelgren. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$49,954 (\$58,556).

Landscape Water Check program. 2010-2011. **Kopp (PI)** and Kjelgren. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$52,904 (\$39,678).

Landscape Water Check program. 2010-2011. **Kopp (PI)** and Kjelgren. Central Utah Water Conservancy District. Orem, UT. Amount: \$90,764 (*\$68,073*).

Landscape Water Check program. 2010-2011. **Kopp (PI)** and Kjelgren. Metropolitan Water District of Salt Lake and Sandy. Sandy, UT. Amount: \$47,311 (*\$35,483*).

Water Conservation for Lawn and Landscape: An eXtension Community of Practice. 2009-2012. **Kopp (PI)** and Rupp. The Board of Regents of the University of Nebraska, Lincoln, NE. Amount: \$60,000 (*\$30,000*).

Landscape Water Check program. 2009-2010. **Kopp (PI)** and Kjelgren. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$83,586 (*\$62,689*).

Landscape Water Check program. 2009-2010. **Kopp (PI)** and Kjelgren. Central Utah Water Conservancy District. Orem, UT. Amount: \$83,652 (*\$62,739*).

Landscape Water Check program. 2008-2009. **Kopp (PI)** and Kjelgren. Jordan Valley Water Conservancy District. Amount: \$118,580 (*\$83,006*).

Water savings partnership: leveraging water district, state and university resources to improve landscape water conservation programs in the Weber Basin Water Conservancy District. 2008. Kjelgren and **Kopp (Co-PI)**. Weber Basin Water Conservancy District. Amount: \$20,000 (*\$10,000*).

Landscape Water Check program. 2007-2008. **Kopp (PI)**, Kjelgren, Johnson, and Rupp. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$82,330 (*\$57,631*).

Large water user workshop program. 2007. **Kopp (PI)**, Kjelgren, Johnson, and Rupp. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$15,500 (*\$13,950*).

Landscape Water Check program. 2006-2007. **Kopp (PI)** and Kjelgren. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$103,027 (*\$51,514*).

Large water user workshop program. 2006. **Kopp (PI)**, Kjelgren, Johnson, and Rupp. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$23,480 (*\$21,132*).

Development of web-based instructional modules for pesticide safety. 2004-2006. Beard and **Kopp (Co-PI)**. Utah Department of Agriculture and Food. Amount: \$68,000 (*\$6800*).

Development of a landscape water check program. 2004. **Kopp (PI)** and Kjelgren. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$101,587 (*\$50,794*).

Revision of the pest control study guides structural and health related pest control and right-of-way pest control and development of category exam questions for licensed pesticide applicators of Utah. 2003. Beard and **Kopp (Co-PI)**. Utah Department of Agriculture and Food. Amount: \$17,000 (*\$1700*).

Water use workshop series and water-wise plant marketing program. 2003. **Kopp (PI)**. Marriner S. Eccles Foundation. Amount: \$5000 (*\$5000*).

Large water user workshop program. 2002-2005. **Kopp (PI)**. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$40,000 (*\$40,000*).

Internal Extension Funding

Phase II - Implementing water conservation strategies in Eagle Mountain City, Utah. 2019. Endter-Wada, **Kopp (Co-PI)**, Rupp, Johnson, Sun, Wuenschell, Wheaton, Thomson, Garrard, McGinty, and McGinty. USU Extension Water Advisory Board (Extension Water Initiative Grant). Amount: \$40,000 (*\$15,000*).

USU Water Check program expansion: GIS- and ET-based residential and commercial analysis and research tools. 2018. **Kopp (PI)**, Endter-Wada, Rupp, Sun, Johnson, Wheaton, Wuenschell, Duer, and Kryger. USU Extension Water Advisory Board (Extension Water Initiative Grant). Amount: \$48,750 (*\$48,750*).

Landscape lysimeter renovation to quantify plant water use. 2018. Sun, **Kopp (Co-PI)**, Rupp, Johnson, and Endter-Wada. USU Extension Water Advisory Board (Extension Water Initiative Grant). Amount: \$31,696 (*\$15,848*).

Drip irrigation and soil moisture monitoring system for the Bridger Park Community Garden. 2018. Gunnell, Akina, **Kopp**, Cardon, Goodspeed and Hansen. Utah State University Cooperative Extension. Amount: \$9000 (*\$0*).

Extension Outreach Coordinator for the Center for Water Efficient Landscaping. 2018. **Kopp (PI)**, Wheaton, Endter-Wada, Rupp, Johnson, Sun, Wuenschell. USU Extension Intern Support. Amount: \$4000 (*\$4000*).

USU Extension Water Check program expansion: Web-based tool development and tablet-based app customization. 2017. **Kopp (PI)**, Endter-Wada, Rupp, Johnson, Wheaton, Wuenschell, Rutishauser, and Palmer. USU Extension Water Advisory Board (Extension Water Initiative Grant). \$37,958 (*\$37,958*).

Identifying and meeting Salt Lake City's landscape water conservation potential. 2017. Endter-Wada, **Kopp (Co-PI)**, Rupp, Wuenschell, Wheaton, Garrard, McGinty, and Duer. USU Extension Water Advisory Board (Extension Water Initiative Grant). \$48,060. (*\$15,000*).

Improving Iron County's landscape Water Check program. 2016. Schaible and **Kopp**. USU Cooperative Extension. \$7200 (*\$0*).

Implementing water conservation strategies in Eagle Mountain City. 2016. Rupp, Endter-Wada, **Kopp (Co-PI)**, Johnson, Glenn, Wheaton, Anderson, Bell, Pengra. Extension Water Advisory Board (Extension Water Initiative Grant). \$48,311 (*\$20,000*).

Cache County Cooperative Extension free Water Check program. 2015-2016. Muntz (PI) and **Kopp** (Project Mentor). USU Extension New Agent Grant. Amount: \$4962 (\$0).

Testing experimental irrigation system interventions in the Salt Lake City Department of Public Utilities service area. 2014. Utah State University Extension Grant. **Kopp (PI)**, Endter-Wada, and Glenn. Utah State University Cooperative Extension. Amount: \$9226 (\$3137).

Utah State University Extension intern grant. 2014. **Kopp (PI)** and Waters. Utah State University Cooperative Extension. Amount: \$4000 (\$4000).

Landscape water conservation: getting the message out there. 2012-2013. Buffer, **Kopp (Co-PI)** and Rupp. Utah State University Cooperative Extension. Amount: \$10,000 (\$5000).

Central Iron County Water Conservancy District/Iron County Cooperative Extension Water Check Program. 2010. Schaible and **Kopp**. Utah State University Cooperative Extension Service. Amount: \$5200 (\$0).

Water-wise landscaping online curriculum development for Utah water districts, extension, and USU Extension. 2010. Rupp and **Kopp (Co-PI)**. Utah State University Cooperative Extension Service. Amount: \$6000 (\$3000).

A team approach to developing horticulture education. 2003. Cerny and **Kopp (Co-PI)**. Utah State University Cooperative Extension Service. Amount: \$10,000 (\$3000).

Extension Water Issues Team funding. 2002-2003. Cerny, Hill, Koenig, **Kopp**, and Mesner. Utah State University Cooperative Extension Service. Amount: \$10,000 (\$2500).

External Research Funding

Monitoring ground water quality and developing best water management practices for sustainable green industry production. 2019. Sun, **Kopp (Co-PI)**, and Rupp. Utah Specialty Crop Block Grant Program-Utah Department of Agriculture and Food (USDA). Amount: \$64,610 (\$5000).

Applied drought research-Salt Lake City municipal golf courses. 2018. **Kopp (PI)**, Johnson, and Bushman. Salt Lake City Department of Public Utilities. Amount: \$24,960 (\$8320).

Effect of “drought tolerant” labeling on consumers’ preferences and willingness to pay for nursery crops. 2015-2017. Pozo, Rupp and **Kopp**. Utah Department of Agriculture and Food. Amount: \$17,850 (\$0).

Documenting water use for turfgrasses in the United States. 2015-2018. Stier, **Kopp**, Watkins, Elmore, Henderson, and Baird. The Lawn Institute. Amount: \$66,197 (\$5598).

Assistance to the state Water Resources Research Institute program (Information systems for landscape water conservation). 2015. McKee, Stevens, and **Kopp**. USDO-USGS. Amount: \$424,865 (\$31,086).

2015 National low-input cool season test. 2015-2021. Johnson and **Kopp (Co-PI)**. National Turfgrass Evaluation Program. Amount: \$5,000 (\$1250).

Testing experimental irrigation system interventions in the Salt Lake City Department of Public Utilities service area. 2014. **Kopp (PI)**, Endter-Wada and Glenn. Salt Lake City Department of Public Utilities. Amount: \$10,000 (\$3333).

Drought-tolerant Kentucky bluegrass dry-down variety trial. 2014-2016. **Kopp (PI)** and Johnson. Utah Water Conservation Forum. Amount: \$3000 (\$3000).

Turfgrass fertilizer volatilization study. 2014. **Kopp (PI)** and Johnson. Agrium Advanced Technologies. Amount: \$4000 (\$4000).

Salt Lake City Parks and Public Lands: Parks auditing project. 2013-2014. **Kopp (PI)**. Siemens, Inc. Amount: \$25,789 (\$25,789).

Insect-attacking nematodes and water conservation practices as alternatives to insecticides for billbug control in Intermountain West turfgrass. 2012-2015. USDA-NIFA. Ramirez, Salaiz, Johnson, Bechinski, and **Kopp (Co-PI)**. Amount: \$125,697 (\$3000).

Turf mix study. 2012-2013. **Kopp (PI)**. W.R. Henderson Construction, Inc. Amount: \$22,590 (\$22,590).

Salt Lake City Parks and Public Lands: Golf auditing project. 2012-2013. **Kopp (PI)**. Siemens, Inc. Amount: \$60,654 (\$60,654).

The real deal: Determining actual water use in irrigated landscapes by mining water billing data. 2010-2012. Kjelgren and **Kopp (Co-PI)**. United States Bureau of Reclamation. Amount: \$95,539 (\$47,770).

Value landscape engineering. 2009. Rosenberg, **Kopp (Co-PI)**, Kratsch, Rupp, Johnson, Kjelgren. Central Utah Water Conservancy District. Amount: \$51,028 (\$7230).

Developing a landscape water check program to generate usable data. 2004-2005. Kjelgren and **Kopp (Co-PI)**. Jordan Valley Water Conservancy District, West Jordan, UT. Amount: \$101,587 (\$50,794).

2003 National fineleaf fescue test. 2003-2008. Johnson and **Kopp (Co-PI)**. National Turfgrass Evaluation Program. Amount: \$12,000 (\$3000).

2003 National bentgrass (putting green) test. 2003-2008. Johnson and **Kopp (Co-PI)**. National Turfgrass Evaluation Program. Amount: \$12,000 (\$3000).

Maximum length of summer dormancy in Kentucky bluegrass with or without minimal irrigation. 2003-2005. Johnson and **Kopp (Co-PI)**. International Turf Producers Foundation. Amount: \$7000 (\$2100).

Eddy covariance measurements of turfgrass water use in the Intermountain West. 2003. **Kopp (PI)**, Kjelgren, Johnson, and Hipps. United States Bureau of Reclamation. Amount: \$20,000 (\$6000).

Improving water loss estimates for Kentucky of bluegrass in the Mountain West using advanced micrometeorological techniques. 2002. **Kopp (PI)**, Kjelgren, Hipps, and Johnson. United States Bureau of Reclamation. Amount: \$25,000 (\$7500).

Improving water loss estimates for Kentucky bluegrass in Utah using advanced micrometeorological techniques. 2002. **Kopp (PI)**, Kjelgren, Hipps, and Johnson. Utah Division of Water Resources. Amount: \$15,000 (\$4500).

Internal Research Funding

Improving water use of turfgrass and ornamental landscapes (UTA01267). 2018-2020. **Kopp (PI)**. Utah Agricultural Experiment Station. Amount: \$18,000 or \$6000/yr (\$18,000).

Installation and maintenance of weather stations in Eagle Mountain City. 2017. Utah State University Research and Graduate Studies, Utah Climate Center, Department of Plants, Soils and Climate. Endter-Wada, Gillies, Carlisle, Johnson, Rupp, and **Kopp**. Amount: \$36,408 (\$0).

Utah Agricultural Experiment Station. 2016-2017. **Kopp (PI)**. Improving water use of turfgrass and ornamental landscapes (UTA01267). Amount: \$19,000 or \$9500/yr (\$19,000).

Evaluation of climate-based controllers for landscape irrigation. 2013-2014. **Kopp (PI)**. Utah State University Cooperative Extension. Amount: \$8100 (\$8,100).

Utah Agricultural Experiment Station. 2012-2017. **Kopp (PI)**. Sustainable urban landscapes: Water and nutrient conservation (UTA01099). Amount: \$47,500 or \$9500/yr (\$57,000).

Replacement of essential equipment for the analysis of nitrate, ammonium, and phosphate in soils and water. 2010. Norton, Reeve, Stark and **Kopp (Co-PI)**. Utah Agricultural Experiment Station. Amount: \$23,520 (\$5880).

Extension water-wise intern support. 2010. Kjelgren and **Kopp (Co-PI)**. Utah Agricultural Experiment Station. Amount: \$6000 (\$3000).

Xeric or conservation landscapes: How knowledge and familiarity influence perceptions of different types of landscapes. 2007-2008. Marquardt-Pyatt and **Kopp (Co-PI)**. ADVANCE-NSF (Program for the Recruitment and Retention of Female Faculty in the Sciences and Engineering). Utah State University. Amount: \$8410 (\$2523).

Rooting dynamics and competition of turfgrasses in competition with trees. 2005. **Kopp (PI)**, Johnson, Kratsch, and Kjelgren. Community/University Research Initiative. Utah State University. Amount: \$33,000 (\$23,100).

Gray water irrigation: constituent uptake, leaching, and persistence. 2005. **Kopp (PI)** and Mesner. NSF-ADVANCE (Program for the Recruitment and Retention of Female Faculty in the Sciences and Engineering). Utah State University. Amount: \$7900 (\$3950).

Evaluation of Intermountain West native and adapted grass species and their management for turfgrass applications. 2004. Johnson and **Kopp (Co-PI)**. Community/University Research Initiative. Utah State University. Amount: \$14,000 (\$4200).

Demonstrating the water and nutrient use of turfgrass and ornamental landscapes. 2003-2005. **Kopp (PI)**. Utah State University Cooperative Extension Service. Amount: \$10,000 (\$10,000).

Evaluation of water use efficiency and carbon isotopic composition in turfgrass species for use in the Intermountain West. 2002. **Kopp (PI)**. New Faculty Research Grant. Utah State University. Amount: \$15,000 (\$15,000).

Utah Agricultural Experiment Station. 2001-2011. **Kopp (PI)**. Turfgrass management in the Intermountain West: Conservation of water and nutrients (UTA00359). Amount: \$99,000 or \$9000/yr (\$99,000).

Best management practices for low-water use turfgrass for the Intermountain West region. 2001. Johnson and **Kopp (Co-PI)**. Community/University Research Initiative. Utah State University. Amount: \$10,000 (\$3000).

Teaching Funding

Redevelopment of PSC 3420-Landscape Irrigation Design. 2013. **Kopp (PI)**. USU Regional Campuses and Distance Education. Amount: \$600 (\$600).

Online course development for horticulture classes. 2008-2009. Rupp, Roper, **Kopp (Co-PI)**, Aston, Varga and Kratsch. USU Regional Campuses and Distance Education. Amount: \$20,000 (\$2000).

Federal Appropriations Funding (USDA/CSREES)

Drought Management Initiative. Funding to support Department of Plants, Soils & Climate landscape water conservation research and outreach programs. 2008-2011. Johnson, Kjelgren, **Kopp (PI of portion under my administration)**, and Kratsch. United States Department of Agriculture. Amount: \$230,938 (\$46,188).

Drought Management Initiative. Hatch Appropriation to support Department of Plants, Soils & Climate landscape water conservation research and outreach programs. Johnson, Kjelgren, **Kopp (PI of portion under my administration)**, and Kratsch. 2007-2008. United States Department of Agriculture. Amount: \$92,046 (\$18,409).

Drought Management Initiative. Funding to support Department of Plants, Soils & Climate landscape water conservation research and outreach programs. 2006-2007. Kjelgren, Johnson, **Kopp (PI of portion under my administration)**, and Kratsch. United States Department of Agriculture. Amount: \$269,986 (\$53,997).

Drought Management Initiative. Funding to support Department of Plants, Soils, and Biometeorology landscape water conservation research and outreach programs. 2005-2006. Kjelgren, Johnson, **Kopp (PI of portion under my administration)**, and Kratsch. United States Department of Agriculture. Amount: \$210,000 (\$42,000).

Utah Botanical Center. Funding to support comparison of traditional, water-wise, and hybrid landscapes. 2004-2005. **Kopp (PI)**. United States Department of Agriculture. Amount: \$45,000 (\$45,000).

Drought Management Initiative. Funding to support Department of Plants, Soils, and Biometeorology landscape water conservation research and outreach programs. 2004-2005. Kjelgren, Johnson, **Kopp (PI of portion under my administration)**, and Kratsch. United States Department of Agriculture. Amount: \$210,000 (\$42,000).

State of Utah Line Item Funding

Center for Water Efficient Landscaping. Funding to support landscape water conservation research and Extension programs. 2016-2020. Rupp, Johnson, **Kopp**, and Endter-Wada. Utah State Legislature. Amount: \$1,512,000 or \$378,000/yr (\$94,500/yr).

Center for Water Efficient Landscaping. Funding to support landscape water conservation research and Extension programs. 2001-2015. Rupp, Kjelgren, Johnson, and **Kopp**. Utah State Legislature. Amount: \$1,470,000 or \$98,000/yr (\$24,500/yr).

Center for Water Efficient Landscaping. One-time funding to support water conservation research and Extension programs. 2014. Rupp, Kjelgren, Johnson, **Kopp**, and Endter-Wada. Utah State Legislature. Amount: \$84,500 (\$34,500).

EXTENSION PUBLICATIONS AND ACTIVITIES

Books

Wheaton, Adrea, Larry Rupp, Anne Spranger, David Anderson, Paul Johnson, **Kelly Kopp** and Roger Kjelgren. 2017. [Combinations for conservation: Recommended plant groupings for low-water landscapes](#). Utah State University Extension. Logan, UT.

Book Chapters

Kopp, Kelly and Jaydee Gunnell. 2011. Practical turfgrass areas. *In* Water-Efficient Landscaping in the Intermountain West. USU Academic Press. Logan, UT.

Kelly Kopp. 2008. Irrigation and plant water needs. *In* Utah Master Gardener Handbook. USU Cooperative Extension. Logan, UT.

Turfgrass Integrated Pest Management Advisories (8061 member listserv as of January 2020)

Kopp, Kelly (Ed.). Fall 2018. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 11 \(3\)](#). Topics included: fertilization, overseeding, and fall management practices. Distributed via listserv to 7218 members.

Kopp, Kelly (Ed.). Summer 2018. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 11 \(2\)](#). Topics included: *Ascochyta* leaf blight, summer patch/necrotic ring spot complex, and summer management practices. Distributed via listserv to 7182 members.

Kopp, Kelly (Ed.). Spring 2018. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 11 \(1\)](#). Topics included: Armyworm, clover mite, snow mold diseases, new fact sheets, and spring management practices. Distributed via listserv to 6911 members.

Kopp, Kelly (Ed.). Winter 2017. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 10 \(4\)](#). Topics included: Winterkill, snow mold diseases, and new fact sheets. Distributed via listserv to 6658 members.

Kopp, Kelly (Ed.). Fall 2017. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 10 \(3\)](#). Topics included: fertilization, necrotic ring spot, overseeding, and fall management practices. Distributed via listserv to 6614 members.

Kopp, Kelly (Ed.). Summer 2017. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 10 \(2\)](#). Topics included: “dog patch”, chinch bug, sod webworm, and billbug. Distributed via listserv to 6582 members.

Kopp, Kelly (Ed.). Spring 2017. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 10 \(1\)](#). Topics included: Billbug monitoring, weed control, snow mold, and spring management practices. Distributed via listserv to 6506 members.

Kopp, Kelly (Ed.). Winter 2016. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 9 \(1\)](#). Topics included: basic turfgrass entomology, winterkill of turfgrasses, and upcoming spring management practices. Distributed via listserv to 6051 members.

Kopp, Kelly (Ed.). Spring 2015. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 8 \(2\)](#). Topics included: Spring pest monitoring, necrotic ring spot, and spring management practices. Distributed via listserv to 5688 members.

Kopp, Kelly (Ed.). Fall 2014. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 7 \(4\)](#). Topics included: Crane fly, new insecticide for billbug control, necrotic ring spot and summer patch, and fall management practices. Distributed via listserv to 5259 members.

Kopp, Kelly (Ed.). Summer 2014. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 7 \(3\)](#). Topics included: Cyanobacteria, chinch bugs, sod webworm and billbug. Distributed via listserv to 5196 members.

Kopp, Kelly (Ed.). Spring 2014. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 7 \(2\)](#). Topics included: Weeds and weed control, voles, snow mold, necrotic ring spot, and spring management practices. Distributed via listserv to 4796 members.

Kopp, Kelly (Ed.). Winter 2014. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 7 \(1\)](#). Topics included: Winterkill of turfgrasses, snow molds, and upcoming spring management practices. Distributed via listserv to 4471 members.

Kopp, Kelly (Ed.). Fall 2013. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 6 \(3\)](#). Topics included: Late fall fertilization of athletic fields, overseeding, and fall management practices. Distributed via listserv to 4420 members.

Kopp, Kelly (Ed.). Summer 2013. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 6 \(2\)](#). Topics included: “Dog patch”, chinch bugs, summer management practices, and new USU Extension fact sheets. Distributed via listserv to 4345 members.

Kopp, Kelly (Ed.). Spring 2013. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 6 \(1\)](#). Topics included: Spring monitoring for insects, voles, and spring management practices. Distributed via listserv to 3914 members.

Kopp, Kelly (Ed.). Winter 2013. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 5 \(4\)](#). Topics included: Buffalograss, new USU Extension fact sheets, and spring management practices. Distributed via listserv to 3685 members.

Kopp, Kelly (Ed.). Fall 2012. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 5 \(3\)](#). Topics included: Chinch bugs, sod webworm, Banks grass mite, summer patch, necrotic ring spot and fall management practices. Distributed via listserv to 3598 members.

Kopp, Kelly (Ed.). Summer 2012. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 5 \(2\)](#). Topics included: turfgrass and tree competition, billbug update, sod webworm, white grubs and cultural practices. Distributed via listserv to 3535 members.

Kopp, Kelly (Ed.). Spring 2012. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 5 \(1\)](#). Topics included: preventive treatments for turf insect pests, white grubs, sod webworm, billbug, necrotic ring spot and cultural practices. Distributed via listserv to 2954 members. Distributed via listserv to 2954 members.

Kopp, Kelly (Ed.). Spring 2011. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 4 \(2\)](#). Topics included: pink and gray snow mold, billbugs, and cultural practices. Distributed via listserv to 2687 members.

Kopp, Kelly (Ed.). Winter 2011. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 4 \(1\)](#). Topics included: life history and management of white grubs and cultural practices for their management. Distributed via listserv to 1956 members.

Kopp, Kelly (Ed.). Fall 2010. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 3 \(2\)](#). Topics included: necrotic ring spot, Ascochyta leaf blight, grubs and introductions to USU's Extension Entomologist and Plant Pathologist. Distributed via listserv to 1645 members.

Kopp, Kelly (Ed.). Spring 2010. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 3 \(1\)](#). Topics included: necrotic ring spot, pink and gray snow mold, armyworm, cutworm, cultural practices, and earthworms. Distributed via listserv to 1247 members.

Kopp, Kelly (Ed.). Fall 2009. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 2 \(1\)](#). Topics included: take-all patch, pink and gray snow mold, billbugs, grubs, cultural practices, and imidacloprid. Distributed via listserv to 941 members.

Kopp, Kelly (Ed.). Fall 2008. USU Extension Turfgrass IPM Advisory. Utah State University. [Vol 1 \(1\)](#). Topics included: necrotic ring spot, pink snow mold, fading out, sod webworm, grubs, and cultural practices. Distributed via listserv to 210 members.

Bulletins/Fact Sheets

Kopp, Kelly, Michael Caron, Helen Muntz, and Jaydee Gunnell. 2018. [Northern Utah turfgrass management calendar](#). USU Extension Publication No. Horticulture/Turfgrass/2017-05pr.

Kopp, Kelly and Rick Heflebower. 2018. [St. George Area, Utah turfgrass management calendar](#). USU Extension Publication No. Horticulture/Turfgrass/2017-06pr.

Kopp, Kelly, Michael Johnson, and Steven Price. 2018. [Southeast Utah turfgrass management calendar](#). USU Extension Publication No. Horticulture/Turfgrass/2017-04pr.

Kopp, Kelly, Candace Schaible, and Mark Nelson. 2018. [Southwest Utah turfgrass management calendar](#). USU Extension Publication No. Horticulture/Turfgrass/2017-03pr.

Beddes, Taun, Michael Caron, **Kelly Kopp**, and Corey Ransom. 2017. [Prostrate and spotted spurge management in home landscapes](#). USU Extension Publication No. Horticulture/Landscape/2017-02pr.

Beddes, Taun, Michael Caron, James Barnhill, and **Kelly Kopp**. 2017. [Suppression and control of field bindweed — \(perennial morning glory\) in residential areas](#). USU Extension Publication No. Horticulture/Weeds/2017-01pr.

Caron, Michael, Candace Schaible, Rick Heflebower, Grant Cardon, Taun Beddes, and **Kelly Kopp**. 2017. [Preparing soil for turfgrass establishment-Southern Utah](#). USU Extension Publication No. Horticulture/Turf/2017-02pr.

Caron, Michael, Grant Cardon, Taun Beddes, and **Kelly Kopp**. 2017. [Preparing soil for turfgrass establishment-Northern Utah](#). USU Extension Publication No. Horticulture/Turf/2017-01pr.

Kopp, Kelly, Niel Allen and Trent Wilde. 2016. [Simple Sprinkler Performance Testing for Piute County](#). USU Extension Publication No. Horticulture/Turfgrass/2016-01pr.

Kopp, Kelly, Niel Allen and Trent Wilde. 2016. [Simple Sprinkler Performance Testing for Wayne County](#). USU Extension Publication No. Horticulture/Turfgrass/2016-02pr.

Beddes, Taun, **Kelly Kopp**, Ralph Whitesides, and Jaydee Gunnell. 2015. [Weed control options for residential lawns in Utah](#). USU Extension Publication No. Horticulture/Turfgrass/2015-01pr.

Ramirez, Ricardo, and **Kelly Kopp**. 2015. [Common Crane Fly](#). USU Extension Publication No. ENT-176-15PR.

Lynch, Jeremy, Roslynn Brain and **Kelly Kopp**. 2015. [Greywater systems](#). USU Extension Publication No. sustainability/2015/01pr.

Kopp, Kelly, Ryan S. Davis, and Ricardo A. Ramirez. 2013. [Chinch bugs](#). USU Extension Publication No. ENT-169-13PR.

Claudia Nischwitz, **Kelly Kopp**, JayDee Gunnell, Kent Evans, and Erin Frank. 2013. [Necrotic ring spot and summer patch of turfgrass](#). USU Extension Publication No. PLP-019pr.

Kopp, Kelly, Niel Allen and Mark Nelson. 2013. [Simple sprinkler performance testing for Beaver County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-02pr.

Kopp, Kelly, Niel Allen and Mike Johnson. 2013. [Simple sprinkler performance testing for Blanding, Utah](#). USU Extension Publication No. Horticulture/Turfgrass/2013-03pr.

Kopp, Kelly, Niel Allen and Mike Pace. 2013. [Simple sprinkler performance testing for Box Elder County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-03pr.

Kopp, Kelly, Niel Allen and Taun Beddes. 2013. [Simple sprinkler performance testing for Cache County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-04pr.

Kopp, Kelly, Niel Allen and Ron Patterson. 2013. [Simple sprinkler performance testing for Carbon County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-05pr.

Kopp, Kelly, Britney Hunter, and Niel Allen. 2013. [Simple sprinkler performance testing for Davis County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-01pr.

Kopp, Kelly, Niel Allen and Troy Cooper. 2013. [Simple sprinkler performance testing for Duchesne County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-06pr.

- Kopp, Kelly**, Niel Allen and Dennis Worwood. 2013. [Simple sprinkler performance testing for Emery County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-07pr.
- Kopp, Kelly**, Niel Allen and Trent Wilde. 2013. [Simple sprinkler performance testing for Fillmore, Utah](#). USU Extension Publication No. Horticulture/Turfgrass/2013-08pr.
- Kopp, Kelly**, Niel Allen and Kevin Heaton. 2013. [Simple sprinkler performance testing for Garfield County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-25pr.
- Kopp, Kelly**, Niel Allen and Mike Johnson. 2013. [Simple sprinkler performance testing for Hanksville, Utah](#). USU Extension Publication No. Horticulture/Turfgrass/2013-09pr.
- Kopp, Kelly**, Niel Allen and Candace Schaible. 2013. [Simple sprinkler performance testing for Iron County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-24pr.
- Kopp, Kelly**, Niel Allen and Jeff Banks. 2013. [Simple sprinkler performance testing for Juab County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-10pr.
- Kopp, Kelly**, Niel Allen and Kevin Heaton. 2013. [Simple sprinkler performance testing for Kane County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-27pr.
- Kopp, Kelly**, Niel Allen and Trent Wilde. 2013. [Simple sprinkler performance testing for Millard County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-11pr.
- Kopp, Kelly**, Niel Allen and Mike Johnson. 2013. [Simple sprinkler performance testing for Moab, Utah](#). USU Extension Publication No. Horticulture/Turfgrass/2013-12pr.
- Kopp, Kelly**, Niel Allen and Mike Johnson. 2013. [Simple sprinkler performance testing for Monticello, Utah](#). USU Extension Publication No. Horticulture/Turfgrass/2013-13pr.
- Kopp, Kelly**, Niel Allen and James Barnhill. 2013. [Simple sprinkler performance testing for Morgan County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-14pr.
- Kopp, Kelly**, Niel Allen and Katie Wagner. 2013. [Simple sprinkler performance testing for Salt Lake County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-15pr.
- Kopp, Kelly**, Niel Allen and Matt Palmer. 2013. [Simple sprinkler performance testing for Sanpete County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-16pr.
- Kopp, Kelly**, Niel Allen and Jody A. Gale. 2013. [Simple sprinkler performance testing for Sevier County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-17pr.
- Kopp, Kelly**, Niel Allen and Sterling Banks. 2013. [Simple sprinkler performance testing for Summit County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-18pr.

- Kopp, Kelly**, Niel Allen and Linden Greehalgh. 2013. [Simple sprinkler performance testing for Tooele County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-19pr.
- Kopp, Kelly**, Niel Allen and Boyd Kitchen. 2013. [Simple sprinkler performance testing for Uintah County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-20pr.
- Kopp, Kelly**, Niel Allen and Meredith Seaver. 2013. [Simple sprinkler performance testing for Utah County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-21pr.
- Kopp, Kelly**, Niel Allen and Allan Sulser. 2013. [Simple sprinkler performance testing for Wasatch County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-22pr.
- Kopp, Kelly**, Niel Allen and Rick Heflebower. 2013. [Simple sprinkler performance testing for Washington County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-23pr.
- Kopp, Kelly**, Niel Allen and Jerry Goodspeed. 2013. [Simple sprinkler performance testing for Weber County](#). USU Extension Publication No. Horticulture/Turfgrass/2013-26pr.
- Goodspeed, Jerry, Rick Heflebower, Taun Beddes, and **Kelly Kopp**. 2012. [Bermudagrass in Utah lawns](#). USU Extension Publication No. Horticulture/Turfgrass/2012-03pr.
- Beddes, Taun and **Kelly Kopp**. 2012. [Lawn fertilizers for cool season turf](#). USU Extension Publication No. Horticulture/Turfgrass/2012-02pr.
- Alston, Diane and **Kelly Kopp**. 2010. [Turfgrass cultural practices and integrated pest management](#). USU Extension Publication No. ENT-138-10.
- Kopp, Kelly**, and Paul Johnson. 2006. [Turfgrass cultivation \(Aerification\)](#). Utah State University Extension Publication No. HG/Turf/2006-02.
- Kopp, Kelly**, Paul Johnson, and Loralie Cox. 2006. [Water-wise landscaping: Practical turfgrass areas](#). Utah State University Extension Publication No. HG/Turf/2006-01.
- Kopp, Kelly** and Mark Nelson. 2005. [Over hill, over dale: Earthworms in the lawn](#). Utah State University Extension Publication No. HG/Grass/2005/01.
- Kopp, Kelly** and Jennie Hoover. 2004. [Irrigation System Maintenance](#). Utah State University Extension Publication No. HG/Irrigation/2004/01.
- Kopp, Kelly** and Paul Johnson. 2004. [Turfgrass cultivars for Utah](#). Utah State University Extension Publication No. HG/Grass/2004/01.
- Cerny, Teresa, **Kelly Kopp**, Maggie Wolf, and Debbie Amundsen. 2002. [Designing a low water use landscape](#). Utah State University Extension Publication No. HG 525.

Cerny, Teresa, Mike Kuhns, **Kelly Kopp** and Michael Johnson. 2002. [Efficient irrigation of trees and shrubs](#). Utah State University Extension Publication No. HG 523.

Hill, Robert W. and **Kelly L. Kopp**. 2002. [Turfgrass water use in Utah](#). Utah State University Extension Publication No. ENGR/BIE/WM 36.

Koenig, Rich, **Kelly Kopp** and Chad Reid. 2002. [Water-wise landscaping: Monitoring irrigation with probes](#). Utah State University Extension Publication No. HG520.

Kopp, Kelly L. and Paul Johnson. 2002. [Basic turfgrass care](#). Utah State University Extension Publication No. HG517. (*Revised March 2011*).

In Preparation

Kopp, Kelly, Claudia Nischwitz, and Helen Muntz. 2018. Fairy ring in turfgrass. USU Extension Publication No. ABCD (*in preparation*).

Training Materials

Kopp, Kelly. 2006. "Integrated turfgrass management." *In* Utah State University Extension Horticulture In-Service Training CD-ROM. Kaysville, UT.

Kopp, Kelly, Teresa Cerny, and Rich Koenig. 2004. "Landscape irrigation". *In* Landscape Irrigation In-Service Training Manual. Beaver, Kaysville, and Castle Dale, UT.

Beard, Richard, Howard Deer, Alan Roe, **Kelly Kopp**, and Jay Karren. 2003. [Structural and health related pest management](#). Pesticide Applicator Training Study Guide. Utah Department of Agriculture and Food.

Alston, Diane, Alan Roe, Scott Ockey, Howard Deer, Shawn Steffan, **Kelly Kopp**, and Matt Palmer. 2003. "Arthropod pests of turf". *In* Plant Pest Workshop In-Service Training Manual. Kaysville, UT.

Kopp, Kelly, Teresa Cerny, Roger Kjelgren, Paul Johnson, and Larry Rupp. 2002. "Large water user workshop series". *In* Landscape Water Use Workbook. Various UT locations.

Kopp, Kelly. 2001. "Landscape irrigation management." *In* Irrigation In-Service Training Manual. Bob Hill and Rich Koenig, *Coords.* Provo, UT.

Multi-Media Materials

Kopp, Kelly. 2010. Irrigation and Water Quality. A web-based instructional module addressing the irrigation and water quality concerns of golf course superintendents in the Intermountain West. Produced in conjunction with USEPA grant: Reducing pesticide usage on Utah golf courses by promoting Integrated Pest Management and reduced risk pesticides (Dr. Paul Johnson, PI).

Trade/Industry Publications

Kopp, Kelly, Mike Richardson, Doug Karcher, and Jack Karlin. 2015. Drought tolerant turfgrass webinar sparks interest. Turf News. May/June:22-23.

Kopp, Kelly. 2012. Plant scientist seeks understanding landscape architect for meaningful soil-plant-water relationship. In [Notes from the field: Water and the design of resilient communities](#). American Society of Landscape Architecture (ASLA). Delivered to ASLA membership in conjunction with ASLA Annual Meeting and Expo. Phoenix, AZ.

Kopp, Kelly L. 2006. Water conservation programs and the turfgrass industry. Turf News. 30:34-38.

Selected National or Multi-State Educational Presentations or Classes

“Don’t let water restrictions strike you out.” Hopkins and **Kopp**. January 25, 2017. Sports Turf Managers Association Annual Conference. Orlando, FL.

“Measuring landscape water use.” **Kopp**. December 7, 2016. Irrigation Association Show and Education Conference. Las Vegas, NV. *(invited)*.

“WaterSense at ‘10’: Where have we been, where will we go.” Blette, Nguyen, Zimmerman, **Kopp**, and Bennett. October 7, 2016. WaterSmart Innovations Conference and Exposition, Las Vegas, NV.

“High tech joins high touch in the landscape.” **Kopp** and Duer. October 6, 2016. WaterSmart Innovations Conference and Exposition, Las Vegas, NV.

“Sustainable conservation through collaboration and analytics.” Duer, **Kopp**, Mayer, Whitesell and Craig. October 6, 2016. WaterSmart Innovations Conference and Exposition, Las Vegas, NV.

“Consumer attitudes toward water-efficient landscapes.” **Kopp**, Endter-Wada, and Duer. November 5, 2015. USEPA WaterSense Webinar. *(invited)*.

“High touch irrigation auditing meets high tech data management.” April 24, 2015. International Water Association Meetings. Cincinnati, OH. *(invited)*.

“Does your course have a drinking problem?” February 4, 2014. Golf Course Superintendent’s Association of America Annual Conference. Orlando, FL. *(invited)*.

Selected Statewide Educational Presentations or Classes

“New turf varieties for low water use”. 2018. Utah Nursery and Landscape Association Annual Conference. Sandy, UT. *(invited)*.

“Water Check Program.” October 26, 2017. Rural Water Association of Utah Water Conservation Certification. Salt Lake City, UT. *(invited)*.

“Identification and treatment of the 5 most common turfgrass diseases.” January 23, 2017. Utah Nursery and Landscape Association Annual Conference. Sandy, UT. *(invited)*.

“Water efficiency research supports data-driven planning.” October 27, 2015. Utah Water User’s Annual Water Summit. Provo, UT. *(invited)*.

“Artificial turf vs. natural grass.” March 12, 2013. Utah Recreation and Parks Association/Intermountain Sports Turf Management Association Joint Annual Meetings. *(invited)*.

“Turfgrass care: Best practices and trouble shooting.” March 1, 2013. Utah Nursery and Landscape Association New Employee Workshop. Thanksgiving Point, Lehi, UT. *(invited)*.

Selected Multi-County, County, or Community Educational Presentations or Classes

“Basic turfgrass management for Salt Lake County.” March 20, 2018. Salt Lake County Master Gardener Seminar. Salt Lake City, UT. *(2 presentations)*.

“Having the best lawn on the block: Tips and tricks.” March 4, 2017. Tooele County Master Gardener Expo. Tooele, UT.

“Reducing the use of pesticides, fertilizers, and water on turfgrass.” January 15, 2014. Cache County Turf and Landscape Management Workshop. *(invited)*.

“Turfgrass management and irrigation for Carbon/Emery Counties.” March 14, 2013. Carbon and Emery Counties Master Gardener Seminar. Castle Dale, UT.

RESEARCH PUBLICATIONS

Book Chapters

Kopp, Kelly L. and Yiwei Jiang. 2013. Turfgrass water use and physiology. *In* Turfgrass: Biology, Use, and Management. Agronomy Monograph No. 56. American Society of Agronomy, Soil Science Society of America, Crop Science Society of America. Madison, WI.

Refereed Journal Articles (*indicates graduate student co-author)

Sun*, Hongyan, **Kelly Kopp**, Scott B. Jones, and Grant Cardon. Numerical simulation of water and nitrogen transport in three turfgrass systems. *Journal of Soil and Water Quality. (Submitted to International Turfgrass Society Research Journal)*.

Muntz, Helen and **Kelly Kopp**. 2019. Influencing water consumption through the Water Check Program. *Journal of Extension*. 57 (4).

Pratt*, Tyler, L. Niel Allen, David E. Rosenberg, Andrew A. Keller, and **Kelly Kopp**. 2018. Urban agriculture and small farm irrigation efficiency: Case studies and trends from Cache Valley, UT. *Agricultural Water Management*. 213:24-35.

Kopp, Kelly, Roger Kjelgren, Paúl Urzagaste*, and Xin Dai. 2017. Physiological and quality responses of turfgrass and ornamental plants to weather-based irrigation control. *International Turfgrass Society Research Journal*. 13:1-10.

Sun*, Hongyan and **Kelly Kopp**. 2013. Identifying high-risk areas of N leaching in the Salt Lake Valley. *International Turfgrass Society Research Journal*. 12:39-46.

Sun*, Hongyan, **Kelly Kopp**, and Roger Kjelgren. 2012. Water efficient urban landscapes-Integrating different water use categorizations and plant types. *HortScience*. 47:254-263.

Johnson, Paul, Adam Van Dyke, Erin Hodgson, Marion Murray, and **Kelly Kopp**. 2012. Interest, incentives, and education towards organic golf course management: A study of Utah golf course superintendents. Online. *Applied Turfgrass Science*. doi:10.1094/ATS-2012-0320-01-TT.

Rosenberg, David, **Kelly Kopp**, Heidi Kratsch, Larry Rupp, Paul Johnson, and Roger Kjelgren. 2011. Value landscape engineering: Identifying costs, water use, labor, and impacts to support landscape choice. *Journal of the American Water Resources Association*. 47:635-649.

Kopp, Kelly L. and Karl Guillard. 2009. Quantifying turfgrass-available N from returned clippings using anion exchange membranes. *International Turfgrass Research Journal*. 11:41-54.

Bunderson*, Landon D., Paul G. Johnson, **Kelly L. Kopp**, Adam Van Dyke. 2009. Tools for evaluating native grasses as low maintenance turf. *HortTechnology*. 19:626-632.

McCammon*, Tony A., Sandra T. Marquardt-Pyatt, **Kelly L. Kopp**. 2009. [Water-conserving landscapes: An evaluation of homeowner preference](#). *Journal of Extension*. 47 (2).

Kopp, Kelly L., Teresa Cerny-Koenig, and Rachel Lopez. 2007. [Educating large landscape water users](#). *Journal of Extension*. 45 (1).

Zollinger*, Nickolee, Roger Kjelgren, Teresa Cerny-Koenig, **Kelly Kopp**, and Rich Koenig. 2006. Drought responses of six ornamental herbaceous perennials. *Scientia Horticulturae*. 109:267-274.

Kopp, Kelly, and Karl Guillard. 2005. Clipping contributions to nitrate leaching from creeping bentgrass under varying irrigation and N rates. *International Turfgrass Research Journal*. 10:80-85.

Ebdon, J.S., and **K. L. Kopp**. 2004. Relationships between water use efficiency, carbon isotope discrimination, and turf performance in genotypes of Kentucky bluegrass during drought. *Crop Science*. 44:1754-1762.

Guillard, Karl, and **Kelly L. Kopp**. 2004. Nitrate leaching from lawn turf receiving different nitrogen fertilizers. *Journal of Environmental Quality*. 33:1822-1827.

Koenig, Richard, Teresa Cerny, Rick Heflebower, Nancy Mesner, **Kelly Kopp**, and Bob Hill. 2004. [A team approach enhances statewide water issues programming](#). *Journal of Extension*. 42 (3).

Johnson, P.G., R.T. Koenig, and **K.L. Kopp**. 2003. Nitrogen, phosphorous, and potassium responses and requirements in calcareous sand greens. *Agronomy Journal*. 95:697-702.

Kopp, Kelly L., and Karl Guillard. 2002. Clipping management and nitrogen fertilization of turfgrass: growth, nitrogen utilization, and quality. *Crop Science*. 42:1225-1231.

Kopp, Kelly L., and Karl Guillard. 2002. Relationship of turfgrass growth and quality to soil nitrate desorbed from anion exchange membranes. *Crop Science*. 42:1232-1240.

Guillard, Karl, Thomas F. Morris, and **Kelly L. Kopp**. 1999. The pre-sidedress soil nitrate test and nitrate leaching from corn. *Journal of Environmental Quality*. 28:1845-1852.

Guillard, Karl, Glenn S. Warner, **Kelly L. Kopp**, and Jonathan D. Stake*. 1999. Leaching of broadcast and banded Atrazine from maize plots. *Journal of Environmental Quality*. 28:130-137.

In Preparation for Submission

Wuenshell, Diana T., Endter-Wada, Joanna, **Kelly Kopp**, Stephanie Duer. 2019. Addressing homeowner knowledge gaps to improve landscape irrigation practices. (*In preparation for submission to the Journal of Contemporary Water Research and Education*).

Peer-Reviewed Proceedings

Kopp, Kelly, and Karl Guillard. 2004. Decomposition and nitrogen release rates of turfgrass clippings. *Proceedings of the 4th International Crop Science Congress*. Brisbane, Queensland, Australia. 26 September – 1 October, 2004.

Selected Abstracts and Scholarly Presentations

Boyle, P., **K. Kopp**, P. Johnson, and S. Bushman. 2019. Clover inclusion in seeded Kentucky bluegrass turf. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. (*abstract for poster presentation*).

Evans, S., **K. Kopp**, P. Johnson, and B. Hopkins. 2019. Do smart irrigation controllers improve water use efficiency in residential landscapes. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. (*abstract for oral presentation*).

Evans, S., **K. Kopp**, and P. Johnson. 2018. A comparison of smart controllers in the urban landscape. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. (*abstract for poster presentation*).

Harris, P., Johnson, P., **K. Kopp**, and S. Bushman. 2018. Salinity tolerance in Kentucky bluegrass hybrids. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. *(abstract for poster presentation)*.

Stier, J.C., **K. Kopp**, E. Watkins, J. Henderson, M. Schiavon J. Baird, A. Chandra, and D. Karcher. 2018. Documenting water use of turfgrasses in the United States. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. *(abstract for poster presentation)*.

Wuenschell, Diana, Endter-Wada, Joanna, Duer, Stephanie and **Kelly Kopp**. 2017. Irrigation system maintenance: Enhancing homeowner skills. November 5, 2017. American Water Resources Association Annual Conference. Portland, OR. *(abstract for oral presentation)*.

Muntz, Helen and **Kelly Kopp**. 2017. Evaluation of Water Check Program in Cache County. National Association of County Agricultural Agents Western Region Conference. Albuquerque, NM. *(abstract for oral presentation)*.

Harris, Paul*, Paul Johnson, **Kelly Kopp**, and Shaun Bushman. 2017. Salinity tolerance in Kentucky bluegrass hybrids. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. *(abstract for oral presentation, graduate student competition)*.

Kopp, Kelly, Paul Harris*, and Xin Dai. 2017. Evaluation of a soil enhancement product for necrotic ring spot control. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. *(abstract for poster presentation)*.

Kopp, Kelly, Roger Kjelgren, Paúl Urzagaste*, and Xin Dai. 2017. Physiological and quality responses of turfgrass and ornamental plants to weather-based irrigation control. *International Turfgrass Society Research Journal*. *(abstract for poster presentation)*.

Hopkins, Bryan and **Kelly Kopp**. 2017. Don't let water restrictions strike you out. January 25, 2017. Sports Turf Managers Association Annual Conference. Orlando, FL. *(abstract for oral presentation)*.

Kopp, Kelly. 2015. High touch irrigation auditing meets high tech data management. International Water Association Meetings. Cincinnati, OH. *(abstract for oral presentation)*.

Kopp, Kelly, Paul Lander, and Peter Mayer. 2014. Getting smart about the Colorado River Basin: research trends. WaterSmart Innovations Conference and Expo. Las Vegas, NV. *(abstract for oral presentation)*.

Kopp, Kelly L., and Paul G. Johnson. 2014. Golf course water use efficiency in the western U.S. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. *(abstract for poster presentation)*.

Sun*, Hongyan and **Kelly Kopp**. 2013. Identifying high-risk areas of N leaching in the Salt Lake Valley, Utah, USA. 12th International Turfgrass Research Conference. Beijing, China. July 14 – 19. *(abstract for oral presentation)*.

- Kopp, Kelly.** 2012. EPA's WaterSense program: questions from turfgrass scientists and managers. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. *(abstract for oral presentation)*.
- Urzagaste*, Paúl and **Kelly Kopp.** 2012. Evaluation of climate-based controllers for landscape irrigation. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. *(abstract for oral presentation)*.
- Wolfarth, Ron, **Kelly Kopp**, Brent Mecham, Brian Vinchesi, and David Zoldoske. 2012. Green code implications for irrigation manufacturers and other stakeholders. WaterSmart Innovations Conference and Expo. Las Vegas, NV. *(abstract for panel presentation/participation)*.
- Kopp, Kelly**, Heidi Kratsch, and Tony McCammon*. 2011. Physiological responses of ornamental landscape plants to drought. *HortScience* 46(9):S391. *(abstract for poster presentation)*.
- Urzagaste*, Paúl and **Kelly Kopp.** 2011. Evaluation of climate-based controllers for landscape irrigation. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. *(abstract for oral presentation)*.
- Sun*, Hongyan, **Kelly Kopp**, and Scott Jones. 2010. Simulating water and nitrogen transport in turf with Hydrus-1D. *In Agronomy Abstracts*. American Society of Agronomy. Madison, WI. *(abstract for oral presentation)*.
- Sun*, H. and **K. Kopp.** 2010. Developing water balances of ornamental landscapes. *HortScience* 45(8): S263. *(abstract for oral presentation)*.
- Sun*, H., **K. Kopp**, Dietz, M., Jones, S., and J. Fan. 2010. A comprehensive research method to investigate the environmental issues of urban landscapes—Water use and nitrogen leaching of urban landscapes on community water quantity and quality. *HortScience* 45(8): S97. *(abstract for poster presentation)*.
- Kopp, Kelly and Tony McCammon*. 2009. Landscape preference and drought tolerance in the Intermountain West. American Water Works Association Water Conservation Workshop. Portland, OR. *(abstract for oral presentation)*.
- Hardman, Nancy, Fred Liljegren, **Kelly Kopp**, and David Rosenberg. 2009. Value Landscape Engineering: spreadsheet and web tools for planning cost-effective, water-efficient, and resource-conserving landscapes. WaterSmart Innovations Conference. Las Vegas, NV. *(abstract for oral presentation)*.
- Kopp, Kelly** and Karl Guillard. 2009. Quantifying turfgrass-available N from returned clippings using anion exchange membranes. International Turfgrass Society Meetings. Santiago, Chile. July 27 – 31. *(abstract for poster presentation)*.
- Rupp, L., R. Kjelgren, and **K. Kopp.** 2009. Graduate Studies in Landscape Water Conservation at Utah State University. WaterSmart Innovations Conference and Expo. Las Vegas, NV. *(abstract for poster presentation)*.

Multi-Media Materials

Rosenberg, David, **Kelly Kopp**, Heidi Kratsch, Roger Kjelgren, Larry Rupp, and Paul Johnson. 2010. Value landscape engineering web-based tool. A tool to help both landscape professionals and consumers make informed decisions about choices in landscape design and maintenance.

Trade/Industry Publications

Kopp, Kelly, Paul Johnson, Eric Klotz, and Craig Miller. 2015. Water use efficiency on golf courses in Utah. *Golf Course Management*. 83:114-117.

Johnson, Paul G., Rich Koenig, and **Kelly L. Kopp**. 2004. How to Retain Nutrients on Calcareous Sand Greens. *TurfGrass Trends Online Research Journal*.

Johnson, Paul G., Rich Koenig, and **Kelly L. Kopp**. 2002. Fertilizing calcareous sand greens. *Golf Course Management*. 70:81-84.

Kopp, Kelly L., and Karl Guillard. 2002. Adjusting nitrogen rates when clippings are returned. *Golf Course Management*. 70:60-64.

ACADEMIC AND RESEARCH MENTORING

Doctoral Students (Major Professor and Dissertation Coordinator)

Paige Boyle	Plants, Soils and Climate	Ph.D. in Ecology, anticipated 2021
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Hongyan Sun	Plants, Soils and Climate	Ph.D. in Plant Science, 2011
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Dissertation Title: Characterizing water and nitrogen dynamics in urban/suburban landscapes (Funded by the Center for Water Efficient Landscaping, the Utah Botanical Center, and US Congressional Appropriation to USU Drought Management Initiative).

Masters Students (Major Professor and Thesis Coordinator)

Candace Schaible	Ag. Systems Tech. and Ed.	M.S. in ASTE, 2017
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Research topic: Assessing homeowners' lawn management practices and preferred sources of educational information.

Shane Evans	Plants, Soils and Climate	M.S. in Plant Science, anticipated 2019
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Research topic: Evaluation of water application and turfgrass health under wireless web-based irrigation.

Paúl Urzagaste	Plants, Soils and Climate	M.S. in Plant Science, 2018
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Research topic: Evaluation of climate-based controllers for landscape irrigation. (Funded by the Center for Water Efficient Landscaping and US Congressional Appropriation to USU Drought Management Initiative).

Christopher Hendrickson	Plants, Soils and Climate	M.S. in Plant Science, 2008
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Co-Major Advisor (with Dr. Heidi Kratsch). Thesis title: Evaluation of competition between turfgrass and trees: rooting dynamics and characteristics (Funded by Community/University Research Initiative and Plants, Soils, and Biometeorology departmental monies).

Landon Bunderson	Plants, Soils and Biometeorology	M.S. in Plant Science, 2007
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Co-Major Advisor (with Dr. Paul Johnson). Thesis title: Evaluation of native and adapted grass species and their management for turfgrass applications in the Intermountain West (Funded by US Congressional Appropriation to USU Drought Management Initiative).

Tony McCammon	Plants, Soils and Biometeorology	M.S. in Plant Science, 2006
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Co-Major Advisor (with Dr. Roger Kjelgren). Thesis title: Water conserving landscapes: an evaluation of drought tolerance and homeowner preference (Funded by USU Cooperative Extension, the Center for Water Efficient Landscaping, and the Utah Botanical Center).

Nickolee Zollinger	Plants, Soils and Biometeorology	M.S. in Plant Science, 2005
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Co-Major Advisor (with Dr. Roger Kjelgren). Thesis title: Responses of traditionally grown and Intermountain West native ornamental herbaceous perennials to drought and salinity (Funded by the Center for Water Efficient Landscaping and the Utah Botanical Center).

Graduate Supervisory Committees

Mahmudur Raman	Civil and Environmental Eng.	M.S. in Hydroinformatics, Anticipated 2022
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Desiree Wickwar	Biology	M.S. in Biology, Anticipated 2021
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Ivy Harvey Thomson	Environment and Society	M.S. in Environmental Sociology, 2019
Nour Aldeen Attaallah	Civil and Environmental Eng.	M.S. in Hydroinformatics, 2018
Avik Mukherjee	Plants, Soils and Climate	Ph.D. in Climate Science, 2019
Paul Harris	Plants, Soils and Climate	M.S. in Plant Science, anticipated 2019
Wayne Honaker	Landscape Architecture and Environmental Planning	M.L.A. in LAEP, 2018
Tyler Pratt	Civil and Environmental Eng.	M.S. in Irrigation Engineering, 2017
Madeleine Dupuy	Biology	Ph.D. in Entomology, 2018
Sonya Welsh	Watershed Science	M.S. in Watershed Sciences, 2012
Jorge Escurra	Biological and Irrigation Engineering	Ph.D. in Irrigation Engineering, 2008
James Gregory	Plants, Soils and Climate	M.S. in Ecology, 2008
Cathy Myers-Roche	Agric. Systems Tech., and Educ.	M.S. in Education, 2008
Hong-Geun Kim	Biology	M.S. in Entomology, 2007
Adam Van Dyke	Plants, Soils and Climate	M.S. in Plant Science, 2007
Rachel Jeppson	Plants, Soils and Biometeorology	M.S. in Plant Science, 2006
Amy Howa Croft	Plants, Soils and Biometeorology	M.S. in Plant Science, 2003
Molly Waters	Plants, Soils and Biometeorology	M.S. in Plant Science, 2002

Student Supervisory Committee Member for Master of Professional Studies in Horticulture: Water Efficient Landscaping Specialization

Nysse Wilson	Plants, Soils and Climate	2020
Moriah Jackson	Plants, Soils and Climate	2020

Katriel Cloward	Plants, Soils and Climate	2020
Trevor Kimball	Plants, Soils and Climate	2019
Kathryn Johnson	Plants, Soils and Climate	2019
Jay Warnick	Plants, Soils and Climate	2019
Kimberly Eden	Plants, Soils and Climate	2018
Jacob Hendrickson	Plants, Soils and Climate	2018
Marci Wood	Plants, Soils and Climate	2018
Ivy Harvey Thomson	Plants, Soils and Climate	2017
Gilbert Young	Plants, Soils and Climate	2017
Kyle Frandsen	Plants, Soils and Climate	2015
Holly Christley	Plants, Soils and Climate	2015
Adrea Wheaton	Plants, Soils and Climate	2014
Elizabeth Westling	Plants, Soils and Climate	2014
Bryce Funk	Plants, Soils and Climate	2013
Brandon Brewer	Plants, Soils and Climate	2011
Ruth Bell	Plants, Soils and Climate	2011
Elisabeth Anderson	Plants, Soils and Climate	2010
Samuel Cook	Plants, Soils and Climate	2009
Jesse Carlson	Plants, Soils and Climate	2009
Kristofer Sagers	Plants, Soils and Climate	2007
Dale Roberts	Plants, Soils and Climate	2007
Jeff Petersen	Plants, Soils and Biometeorology	2006
Zachary Versluis	Plants, Soils and Biometeorology	2006
Heather Johnson	Plants, Soils and Biometeorology	2005
Von Isaman	Plants, Soils and Biometeorology	2005
Cable Jones	Plants, Soils and Biometeorology	2005
Kade Turner	Plants, Soils and Biometeorology	2005
Desiree Van Dyke	Plants, Soils and Biometeorology	2005
Mark Guthrie	Plants, Soils and Biometeorology	2004
Su Robison	Plants, Soils and Biometeorology	2004
Jerry Hunsaker	Plants, Soils and Biometeorology	2004
Talia Buroker	Plants, Soils and Biometeorology	2004
Anne Haueter	Plants, Soils and Biometeorology	2003
Tiffany Graham	Plants, Soils and Biometeorology	2003
Jenny Marshall Hoover	Plants, Soils and Biometeorology	2003
J.J. Stockton	Plants, Soils and Biometeorology	2003
Jalene Hunt	Plants, Soils and Biometeorology	2001
Rachel Morgan Lopez	Plants, Soils and Biometeorology	2001
David Rice	Plants, Soils and Biometeorology	2001
Clifton Smith	Plants, Soils and Biometeorology	2001

TEACHING AND STUDENT ACTIVITIES

Courses Taught

Landscape Irrigation Design (PSC 4420/6420, 2 credits, lecture and laboratory). University Studies-Quantitative Intensive (undergraduate, general education). Introduction to the design of sprinkler and drip irrigation systems for residential and small commercial landscapes. Taught Spring 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016. Taught concurrently online Spring 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017. Course transitioned entirely online in 2016.

Professional Turf and Urban Landscape Water Management formerly Landscape Irrigation Management (PLSC 5100/6100, 3 credits, lecture). Irrigation management and applied water relations of urban landscapes in the arid west. Taught Fall 2006.

Readings in Landscape Water Conservation (PLSC 6230, 2 credits, discussion). Background topics in water development and policy in the West. Current topics on various aspects of water conservation in urban landscapes. Taught Fall 2006, Fall 2019.

Guest Lectures

Plants, Soils & Climate (PSC) 4900-Student Farm Practicum (6), PSC 3400-Sustainable Landscapes (8), PSC 3800-Turfgrass Management (2), PSC 1050-Introduction to Plants, Soils & Climate (3), PSC 5090/6090-Low Water Landscaping (1), Landscape Architecture and Environmental Planning (LAEP) 1030-Introduction to Landscape Architecture (6), LAEP-3500-Planting Design (1), Biological and Irrigation Engineering (BIE) 6860-Research Orientation (1), LAEP 3610-Construction II (1), LAEP 3600-Landscape Materials (1).

OTHER PROFESSIONAL ACTIVITIES AND AFFILIATIONS

PROFESSIONAL SERVICE AND LEADERSHIP

Professional Society Offices and Committees

Crop Science Society of America

2016: Past Chair, Division C-5 (Turfgrass Science), Crop Science Society of America

2015: Chair, Division C-5 (Turfgrass Science), Crop Science Society of America

2014: Chair-Elect, Division C-5 (Turfgrass Science), Crop Science Society of America

2012-present: Division C-5 (Turfgrass Science) Policy and Engagement Committee

2002, 2003, 2011: Presiding Officer, C5 (Turfgrass Science) Graduate Student Paper Competition

2001-2012: Division C-5/Turfgrass Extension Committee

- Member, Extension Symposia Subcommittee, 2002-2012
- Chair, Extension Symposia Subcommittee, 2006

International Turfgrass Research Society

2016-2017: Scientific Program Planning Committee, 13th Annual International Turf Research Conference

2016-2017: Graduate Student Competition and Travel Awards Committee, 13th Annual International Turf Research Conference

Editorial Positions

2012-2013: Associate Editor, International Turfgrass Research Society Journal

2008-2015: Associate Editor, Applied Turfgrass Science Online Journal

2003-2009: Journal of Extension (US Cooperative Extension System) Peer Reviewer

Regional Research and Coordinating Committees

2014-present: Multistate Research Project (W3128)-Scaling Microirrigation Technologies to Address the Global Water Challenge

2011-present: North Central Education Research Activity Committee (NCERA221)-Turfgrass and the Environment

2002-2005: Member, Western Education Research Activity Committee (WERA202)-Climatic Data Applications in Irrigation Scheduling and Water Conservation

- Chair, 4H Subcommittee

2001-present: Western Education Research Activity Committee (WERA011)-Turfgrass Research

Western Extension Directors Association

2014: Western Region Program Leadership Committee Public Value Panel (Safe and Sustainable Water)

Other Professional Activities

2019-present: Member, Scientific Advisory Board, Golf Course Superintendent's Association of America

2019-present: Chair, Alliance for Water Efficiency Research Committee

2017-present: Member, Weber State University Botany Department Advisory Council

2014-present: Member, North Logan Water Conservation Committee

2012-present: Member, Jordan Valley Water Conservancy District Education Committee

2012-present: Member, Water Efficiency Action Network-Colorado River Basin Steering Committee

- Co-Chair, Research Working Group

2012-present: Member, Intermountain Sports Turf Manager's Association Board of Directors

2009-present: Member, Salt Lake City Water Conservation Master Plan Revision Committee

2007-2016: Member, Alliance for Water Efficiency Board of Directors

- Chair, 2014-2016
- Secretary, 2008-2013

2002-present: Member, Salt Lake County Conservation Resource Group

2002-2004: Member, Utah Onsite Wastewater Association

- Chair, Public Relations Committee

- Board of Directors, 2004
- 2002-2003: Member, Salt Lake City Landscape Ordinance Committee
- 2001-present: Member, Utah Water Conservation Forum Board of Directors
- Vice-President, 2009
 - President, 2003
 - Vice-President, 2002
- 2001-2002: Member, Model Landscape Ordinance Committee (Jordan Valley Water Conservancy Dist.)
- 2001-2002: Member, North Logan, Utah Water Conservation Committee
- 2001: Member, Water Conservation Steering Committee (Envision Utah Coalition for Quality Growth)
- 2001: Member, Urban Forestry Steering Committee (Envision Utah Coalition for Quality Growth)

UNIVERSITY SERVICE AND LEADERSHIP

Utah State University

- 2014-2015: Member, Utah State University Year of Water Planning Committee
- 2011: Judge, Intermountain Graduate Research Symposium
- 2011: Interviewer, Utah State University Undergraduate Research Fellow Program
- 2010-2013: Member, Utah State University Center for Women and Gender Advisory Board
- 2009: Member, Search Committee for Director of Analysis, Assessment and Accreditation
- 2009: Member, Center for Women and Gender Organizational Committee
- 2009-present: Member, Pre-Tenure Mentoring Committee (Provost’s Office)
- 2007-2009: Utah State University Sustainability Council
- Member, Water Subcommittee, 2007-2009
- 2007-2008: Focus the Nation Planning Committee (USU climate change program)
- 2005-2008: Member, NSF-ADVANCE Science and Engineering Recruitment Team
- 2005-2008: Member, Women and Gender Research Institute Board of Directors
- 2005-2008: Member, Utah State University Arboretum Committee
- 2003-2004: Member, University Water Initiative Advisory Committee
- Member, Annual Conference Subcommittee
- 2003: E.G. Petersen Extension Award Committee
- 2002-present: Member, Utah State University Extension Water Issues Team
- 2002-present: Member, Utah State University Extension Horticulture Issues Team
- Member, Turfgrass Subcommittee
- 2002-2005: Officer, Utah State University Extension Specialists Association (Secretary/Treasurer)
- 2002-2003: Member, USU Environmental University Task Force
- Member, Landscape Subcommittee
- 2001-2003: State Coordinator of the Utah Master Gardener Program
- 2001-present: Member, Center for Water Efficient Landscaping Board of Directors

Utah State University Cooperative Extension

- 2017-2018: Member, Faculty Search Committee, Extension Landscape Architecture and Environmental Planning Specialist

2016-2017: Chair, Extension Professional Practice Assistant Professor (or Instructor) Horticulture/Water Conservation – Southern Region Search Committee
2015-2016: Member, Ogden Botanical Gardens Signage Committee
2014: Member, USU Extension's E-Learning, Technology and Marketing Visioning Committee

College of Agriculture and Applied Sciences

2007-2010: College of Agriculture Representative to Faculty Senate

- Member, Faculty Senate Executive Committee, 2008-2010
- Member and Secretary, Committee for Faculty Development, Diversity, and Equity, 2008-2010

Plants, Soils & Climate Department

2017-2018: Member, Nominations and Awards Committee
2017-2018: Member, Departmental/Graduate Seminar Committee
2016-2017: Member, Faculty Search Committee, Assistant Professor Landscape Horticulture
2016-2017: Member, Faculty Search Committee, Extension Agriculture Climate Specialist
2016: Member, Faculty Search Committee, Professional Practice Assistant Professor of Biology
2015-2018: Member, Faculty Search Committee, Extension Urban Agriculture Specialist
2013-present: Chair, Extension Committee
2012-2014: Member, Departmental Executive Board (elected)

- 2013-2014: Faculty Chair

2009: Member, Faculty Search Committee, Extension Entomology Specialist (Biology)
2008-2010: Member, Residential Landscape Design Major Committee
2006: Member, Faculty Search Committee, Soil Chemist
2005: Member, Faculty Search Committee, Extension Entomology Specialist (Biology)
2003: Member, Faculty Search Committee, Extension Ornamental Horticulture Specialist
2002-present: Member, Plants, Soils & Climate Dept. Horticulture Curriculum Committee
2002-2005: Member, Plants, Soils, and Biometeorology Dept. Advisory Committee
2002-2004: Member, Plants, Soils, and Biometeorology Dept. Graduate Seminar Committee

Faculty Mentoring

2019-present: Member, Promotion Advisory Committee, Mr. Ryan Davis (Biology)
2019-present: Chair, Promotion Advisory Committee, Ms. Candace Schaible (USU Extension)
2019-present: Member, Promotion Advisory Committee, Ms. Katie Wagner (USU Extension)
2019-present: Member, Promotion Advisory Committee, Mr. Taun Beddes (USU Extension)
2018-present: Member, Promotion Advisory Committee, Dr. Nicki Frey (Wildland Resources)
2018-2020: Member, Promotion Advisory Committee, Dr. David Rosenberg (Civil and Environmental Engineering)
2017-present: Member, Promotion Advisory Committee, Ms. Helen Muntz (USU Extension)
2017-present: Chair, Promotion and Tenure Advisory Committee, Dr. Youping Sun (Plants, Soils and Climate)
2017-present: Member, Promotion Advisory Committee, Dr. Alfonso Torres-Rua (Civil and Environmental Engineering)

2017-2020: Member, Promotion and Tenure Advisory Committee, Dr. Lori Spears (Biology)
2017-present: Member, Promotion and Tenure Advisory Committee, Dr. Sandy Sulzer (Kinesiology and Health Science)
2016-2017: Member, Promotion and Tenure Advisory Committee, Dr. Barty Warren-Kretzschmar (Landscape Architecture and Environmental Planning)
2014-2016: Member, Promotion Advisory Committee, Dr. Brian Warnick (Agricultural Systems and Technology Education)
2014: Member, Promotion Advisory Committee, Ms. Nancy Mesner (Watershed Sciences)
2014-present: Member, Promotion and Tenure Advisory Committee, Dr. Niel Allen (Civil and Biological Engineering)
2014-2016: Member, Promotion Advisory Committee, Dr. Rhonda Miller (Agricultural Systems and Technology Education)
2012-2016: Member, Promotion Advisory Committee, Mr. D. Craig Aston (Plants, Soils and Climate)
2011-2016: Member, Promotion Advisory Committee, Ms. Anne Spranger (Plants, Soils and Climate)
2010-2016: Member, Promotion and Tenure Advisory Committee, Dr. Becki Lawver (Agricultural Systems and Technology Education)
2010-2016: Member, Promotion and Tenure Advisory Committee, Dr. Earl Creech (Plants, Soils and Climate)
2010-2016: Member, Promotion and Tenure Advisory Committee, Dr. Ricardo Ramirez (Biology)
2009-2014: Member, Promotion and Tenure Advisory Committee, Dr. Lindsey Shirley (Agricultural Systems and Technology Education)
2008-2010: Member, Promotion and Tenure Advisory Committee, Dr. Michael Dietz (Environment and Society)

Manuscript Reviews

Agronomy Journal
Transactions of the American Society of Agricultural and Biological Engineers
Crop, Forage, and Turfgrass Management
Crop Science
HortScience
HortTechnology
International Journal of Agriculture and Food Science
International Turfgrass Research Journal
Journal of Environmental Engineering
Journal of Extension
Journal of Irrigation and Drainage Engineering
Natural Sciences Education
Precision Agriculture

Memberships

Agronomy Society of America
Alliance for Low-Input Sustainable Turfgrass (A-LIST)
Alliance for Water Efficiency

Alpha Zeta Agricultural Fraternity
American Society of Horticultural Science
American Water Works Association
Crop Science Society of America
Gamma Sigma Delta Agricultural Honor Society
Golf Course Superintendent's Association of America
Irrigation Association
Sports Turf Managers Association (Intermountain Chapter)
International Turfgrass Society
Soil Science Society of America
Turfgrass Water Conservation Alliance
Utah Water Conservation Forum
Water Efficiency Action Network of the Colorado River Basin