

CURRICULUM VITAE

Jere Ann Boudell, Ph.D.

As of June 2018

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EDUCATION

Ph.D., Plant Biology, Arizona State University, 2004.

Dissertation: Propagule banks as refugia for plant diversity in southwestern riparian ecosystems.

B.S., Organismic Biology, Northeastern State University, 1995.

Senior Project: Effect of soil microtopography on seed bank distribution in the shrub-steppe.

ACADEMIC POSITIONS

- 2014-present. Professor, Undergraduate and Graduate Faculty, Department of Biology, Clayton State University, Morrow, Georgia.
- 2009-2015. Research Associate, Biology Department, Agnes Scott College, Decatur, Georgia.
2014. Visiting Professor, Birla College, Kalyan, India.
- 2011-2014. Ad hoc Graduate Faculty, Biology Department, University of Alabama-Birmingham.
- 2009-2014. Associate Professor, Undergraduate and Graduate Faculty, Department of Natural Sciences, Clayton State University, Morrow, Georgia.
- 2004-2009. Assistant Professor, Department of Natural Sciences, Clayton State University, Morrow, Georgia.

PUBLICATIONS

Journal Articles

- Middleton, B.A., Boudell, J.A., and N. Fisichelli. 2017. Using management to address vegetation stress related to land-use and climate change. *Restoration Ecology* 25: 326-329. DOI: 10.1111/rec.12507
- Boudell, J.A., Dixon M., Rood S. and J. Stromberg. 2015. Restoring functional riparian ecosystems: concepts and applications. *Ecohydrology* 8: 747-752. DOI: 10.1002/eco.1664
- Boudell, J.A. and J.C. Stromberg. 2015. Impact of nitrate enrichment on wetland and dryland seed germination and early seedling development. *Journal of Vegetation Science* 26: 452-463. DOI: 10.1111/jvs.12258

- Stromberg, J.C. and J.A. Boudell. 2013. Floods, drought, and seed mass of riparian plant species. *Journal of Arid Environments* 97: 99-107. DOI: 10.1016/j.jaridenv.2013.05.012
- Stromberg, J.C., Butler, L., Hazelton, A.F. and J.A. Boudell. 2011. Seed size, sediment, and spatial heterogeneity: Post-flood species coexistence in dryland riparian ecosystems. *Wetlands* 31: 1187-1197. DOI: 10.1007/s13157-011-0230-3
- Boudell, J.A. and J.C. Stromberg. 2008. Propagule banks: potential contribution to restoration of an impounded and dewatered riparian ecosystem. *Wetlands* 28(3): 656-665. DOI: 10.1672/07-133.1
- Stromberg, J.C., Boudell, J.A. and A.F. Hazelton. 2008. Differences in seed mass between hydric and xeric plants influence seed bank dynamics in a dryland riparian ecosystem. *Functional Ecology* 22(2): 205-212. DOI: 10.1111/j.1365-2435.2007.01375.x
- Boudell, J.A. and J.C. Stromberg. 2008. Flood pulsing and metacommunity dynamics in a desert riparian ecosystem. *Journal of Vegetation Science* 19: 373-380. DOI: 10.3170/2008-8-18377
- Boudell, J.A., Link S.O. and J. Johanson. 2002. Effect of soil microtopography on seed bank distribution in the shrub-steppe. *Western North American Naturalist* 62(1): 14-24.

Special Issue Editor

- Boudell, J.A., Dixon, M., Rood, S., and J.C. Stromberg (editors). 2015. Special Issue: Restoring Functional Riparian Ecosystems: Concepts and Applications. *Ecohydrology* 8: 747-975. DOI: 10.1002/eco.v8.5/issuetoc

Book Contributions

- Boudell, J.A. (editor). 2018. Landscape Ecology of Wetlands. *In* The Wetland Book I: Structure and Function, Management and Methods. Finlayson CM, Everard M, Irvine K, McInnes RJ, Middleton BA, van Dam AA, and Davidson NC. (Eds.) SpringerReference (www.springerreference.com), Springer-Verlag Berlin Heidelberg. Online publication 2013.
- Boudell, J.A. 2018. Landscape Ecology of Wetlands: Overview. *In* The Wetland Book I: Structure and Function, Management and Methods. Finlayson CM, Everard M, Irvine K, McInnes RJ, Middleton BA, van Dam AA, and Davidson NC. (Eds.) SpringerReference (www.springerreference.com), Springer-Verlag Berlin Heidelberg. Online publication 2013.
- Boudell, J.A. 2018. Metacommunity dynamics of riparian ecosystems. *In* The Wetland Book I: Structure and Function, Management and Methods. Finlayson CM, Everard M, Irvine K, McInnes RJ, Middleton BA, van Dam AA, and Davidson NC. (Eds.) SpringerReference (www.springerreference.com), Springer-Verlag Berlin Heidelberg. Online publication 2013.
- Boudell, J.A. Short Articles. 2018. *In* The Wetland Book I: Structure and Function, Management and Methods. Finlayson CM, Everard M, Irvine K, McInnes RJ, Middleton BA, van Dam AA, and Davidson NC. (Eds.) SpringerReference (www.springerreference.com), Springer-Verlag Berlin Heidelberg.
- Boudell, J.A. Case Study Active Learning Activities. *Biology: How Life Works* 2cd ed. W.H. Freeman Publishers, New York, NY. *In press*.

- Boudell, J.A. 2015. *Scientific American* Active Learning Exercises. Biology: How Life Works 2cd ed. W.H. Freeman Publishers, New York, NY.
- Boudell, J.A. 2014. Chapter Active Learning Exercises. Biology for a Changing World. W.H. Freeman Publishers, New York, NY.
(www.springerreference.com), Springer-Verlag Berlin Heidelberg.
- Boudell, J.A. 2013. Case Study Active Learning Exercises. Biology: How Life Works. W.H. Freeman Publishers, New York, NY.

Other Publications

- Belonoha, W.D. and J.A. Boudell. 2014. Dit Da Jow: Scientific evaluation of iron hit wine. *Wing Chun Illustrated* 17: 16-18.
- Boudell, J.A. 2013. Plant Data Collector: a field biologist's personal assistant. MIT App Inventor blog post. <http://appinventor.mit.edu/explore/stories/plant-data-collector-field-biologist's-personal-assistant.html>
- Boudell, J.A. 2008. SEEDS Chapters: Drivers of Change. *SEEDS Dispersal* 9(2): 7.
- Kodani, C., Boudell, J., Braun, J.R., Clower, C., Jordan, J., Liberatore, J., McFarlane, R. and P. Todebush. 2006. Group size can affect field trip effectiveness. *Georgia Science Teacher* 46(2): 2-6.
- Boudell, J.A. 2005. A synopsis of "Propagule Banks as Refugia for Plant Diversity in Southwestern Riparian Ecosystems." *Arizona Riparian Council Newsletter*. 18(1): 1-6.
- Boudell, J.A. 2005. "Collaborative Learning in Undergraduate Non-majors Biology Classrooms." *CIDLink: Center for Instructional Development Notes from an AAHE/CASTL Cluster Institution*. 1(3): 2.
- Boudell, J.A. 2000-2003. Noteworthy Publications column *in* The Arizona Riparian Council Newsletter.
- Boudell, J.A. and J.C. Stromberg. 1999. Update on the investigation of the role of the seed bank in maintaining biodiversity in southwestern riparian ecosystems. *West Valley Water News*. Spring.

TECHNOLOGY DEVELOPMENT

Android Apps –available for download via Google Play Store, MIT App Inventor Gallery, and/or my website

- 2017. Plant Data Collector v.4.0
- 2015. Arboretum interactive multimedia app
- 2015. Test Meow Animal Behavior
- 2015. Field Help Speed Dial
- 2014. Women of Science Collector Cards
- 2013. Plant Data Collector v1.0
- 2013. Species Area app
- 2013. Bio Data Collector app

Other

2013-present. The connected plant trail at Clayton State University.

GRANTS AND SUPPORT

- 2017. College of Arts and Sciences UCARE Grant, Clayton State University. \$4,000.
- 2016. College of Arts and Sciences Mini Grant, Clayton State University. \$1,000.
- 2015. Learning Innovations that Foster Engagement (LIFE) Faculty Mini-Grant, Clayton State University. \$3,292.
- 2015. Martha Wood Faculty Development Grant, Clayton State University. \$1,070.
- 2015. College of Arts and Sciences URCA Grant, Clayton State University. \$2,400.
- 2014. Center for Instructional Development Travel Grant, Clayton State University \$1,000.
- 2013. Center for Instructional Development Travel Grant, Clayton State University \$1,000.
- 2013. Martha Wood Faculty Development Grant, Clayton State University. \$500.
- 2013. College of Arts and Sciences URCA Grant, Clayton State University. \$2,400.
- 2013. BetterCloud support for Eco Hackathon. \$300.
- 2013. MIT App Inventor Workshop Travel Award. UMass Lowell. \$500.
- 2013. College of Arts and Sciences Mini Grant, Clayton State University. \$1,000.
- 2012. Seed banks along a riparian restoration gradient in the Georgia Piedmont. The Rotary Club of Lake Spivey. \$1,750.
- 2011. Integrated ecology education: An evaluation of the Jesters Creek restoration Project 7-Years Later. Ecological Society of America SEEDS Special Projects Grant. \$800.
- 2010. College of Arts and Sciences Mini Grant, Clayton State University. \$1,000.
- 2008. Ecological Society of America SEEDS Travel Grant. \$1,000.
- 2008. Integrated ecology education: An evaluation of the Jesters Creek restoration project. Co-PI: Steve Burnett, Ecological Society of America SEEDS Special Projects Grant. \$4,900.
- 2008. Ecological Society of America SEEDS Chapter maintenance grant. \$500.
- 2007. Ecological Society of America SEEDS Travel Grant. \$1,000.
- 2007. Ecological Society of America SEEDS Chapter maintenance grant. \$500.
- 2006. Ecological Society of America SEEDS Travel Grant. \$1,000.
- 2005. Disabilities Web Site Demonstration Grant Sub-award. \$2,400.
- 2005. Collaborative Learning Workshop Leader, Clayton State University. \$1,000.
- 2004. Student Success Faculty Development Grant, Clayton State University. \$1,500.
- 2003. Society of Wetland Scientists Travel Grant. \$500.
- 2003. School of Life Sciences Graduate Programs Travel Award, Arizona State University. \$500.
- 2000. Restoration of biodiversity to semi-arid region riparian ecosystems: role of seed banks. Co-PI: Julie C. Stromberg, The Nature Conservancy's Ecosystem Research Program. \$45,546.
- 2000. Role of the seed bank in restoring biodiversity to Southwestern riparian ecosystems. Co-PI: Julie C. Stromberg, Bureau of Reclamation. \$10,000.
- 2000. Role of the seed bank in restoring biodiversity to Southwestern riparian ecosystems. Society of Wetland Scientists Student Research Grant. \$1,350.
- 1998. Grant-in-Aid of Research through Sigma Xi. \$600.

AWARDS, FELLOWSHIPS, AND SPECIAL RECOGNITIONS

- 2017-2022. Graduate Faculty Status, School of Graduate Studies, Clayton State University.
- 2016. Alice J. Smith Faculty Award nominee. College of Arts and Sciences, Clayton State University.
- 2016. Creative Activities and Scholarship Enrichment Program, course release fall 2016 and spring 2017. College of Arts and Sciences, Clayton State University.
- 2015. University Professorship Award nominee. College of Arts and Sciences, Clayton State University.
- 2014. Gene Hatfield Scholar of the Year. College of Arts and Sciences, Clayton State University.
- 2014. Faculty Exchange Program. Office of International Education and Programs, Clayton State University.
- 2013. MIT App Inventor Workshop selected attendee. UMass Lowell.
- 2013. Creative Activities and Scholarship Enrichment Program, course release fall 2013 and spring 2014. College of Arts and Sciences, Clayton State University.
- 2011-2016. Graduate Faculty Status, School of Graduate Studies, Clayton State University.
- 2011. Women's History Month Honoree. Clayton State University.
- 2010. Creative Activities and Scholarship Enrichment Program, course release spring 2011. College of Arts and Sciences, Clayton State University.
- 2010. NSF ADVANCE WEBS (Women Evolving the Biological Sciences) selected attendee.
- 2009-2011. Graduate Faculty Status, School of Graduate Studies, Clayton State University.
- 2009. SEEDS selected program faculty mentor for the 2009 Mt. Lake Biological Station field trip, Ecological Society of America SEEDS Program.
- 2007. Study Abroad, Montepulciano, Italy 2008, Selected instructor, European Council, University System of Georgia.
- 2006. Who's Who Among America's Teachers, *entered by student*.
- 2006. SEEDS selected program faculty mentor for the 2006 Coweeta LTER field trip, Ecological Society of America SEEDS Program.
- 2005. Letter of recognition from Disability Services for being a faculty member who has positively impacted the education of students with disabilities at Clayton State University.
- 2004. Collaborative Learning Fellowship, Center for Instructional Development, Clayton State University.
- 2003. NSF GK-12 "Down to Earth" Fellowship, Arizona State University. \$27,500 + Out-of-State Tuition.
- 2003. NSF Integrative Graduate Education Research and Training (IGERT) Associateship in Urban Ecology, Arizona State University. \$1000 + Instate Tuition.
- 2001. Faculty Emeriti Association Fellowship, Arizona State University \$1000.
- 2001. Preparing Future Faculty Fellowship, Arizona State University.
- 2000. Preparing Future Faculty Fellowship, Arizona State University.
- 1995. Associated Western Universities Northwest-Department of Energy Student Fellowship from Associated Western Universities, Inc. Division, \$3460.
- 1994. Oklahoma Scholar Leadership Enrichment Program award from the Oklahoma State Regents for Higher Education.
- 1994. Karen West Memorial Scholarship from the Independent Order of Foresters,

- \$500.
1994. Associated Western Universities Northwest-Department of Energy Student Fellowship from Associated Western Universities, Inc. Division, \$3500.
1994. Regent's Scholarship from the Oklahoma State Regents for Higher Education, \$550.

PRESENTATIONS

Invited Seminars

2014. Boudell, J.A. and J.C. Stromberg. Impact of nitrate on wetland and dryland seed germination and early seedling development. Department of Botany, Birla College of Arts, Science, and Commerce, Kalyan, India. Visiting Professor.
2014. Boudell, J.A., Mikula, J.M., and W.D. Belonoha. Dit Da Jow: Iron hit wine in Traditional Chinese medicine. Birla College of Arts, Science, and Commerce, Kalyan, India. Visiting Professor.
2014. Boudell, J.A. and J.C. Stromberg. Role of the seed bank in maintaining plant biodiversity in riparian ecosystems. Department of Botany, Birla College of Arts, Science, and Commerce, Kalyan, India. Visiting Professor.
2014. Boudell, J.A., Mikula, J.M., and W.D. Belonoha. Dit Da Jow: Iron hit wine in Traditional Chinese medicine. Department of Botany, Pendharkar College of Arts, Sciences, and Commerce, Dombivli, India.
2012. Boudell, J.A., Jacobo, J.M, and S. Fariñas. Is urban stream restoration possible or is reclamation a more realistic goal in the Georgia Piedmont? Case study: East Jesters Creek in Clayton County, Georgia. USGS National Wetlands Research Center, Lafayette, LA.
2011. Boudell, J.A. Connectivity and fragmentation: metacommunity dynamics in southwestern riparian ecosystems. Department of Biology, University of Alabama, Birmingham, AL.
2009. Boudell, J.A. Metacommunity dynamics in southwestern riparian ecosystems: a synthetic approach. USGS National Wetlands Research Center, Lafayette, LA.
2009. Boudell, J.A. Seed banks as insurance in highly dynamic ecosystems. USDA – Agricultural Research Service -Plant Genetics Resources Conservation Unit, Griffin, GA.
2008. Boudell, J.A. Orchid Ecology: Reproduction. South Metro Orchid Society, Morrow, GA.
2007. Boudell, J.A. Ecology and SEEDS. Science Department, Georgia Perimeter College, Decatur, GA.
2006. Boudell, J.A. Balancing teaching and research at a primarily undergraduate institution. Department of Plant Biology, University of Georgia, Athens, GA.
2004. Boudell, J.A. Riparian Metacommunities: propagule banks as refugia for understory diversity in southwestern riparian ecosystems. Paul Keddy, Edward G. Schlieder Endowed Chair for Environmental Studies, Department of Biological Sciences, Southeastern Louisiana University, Hammond, LA.
2000. Boudell, J.A. Seed bank ecology and restoration of *Prosopis* forests. Hassayampa River Preserve, Wickenburg, AZ.
1999. Boudell, J.A. Seed Bank Ecology. The Native Plant Society of Arizona sponsored by the Desert Botanical Gardens, Phoenix, AZ.

Invited Presentations

- 2016. Boudell, J.A. and G. Tang. The Eco Hackathon: transforming biologists into innovative coders using MIT App Inventor. MIT App Inventor Summit, Massachusetts Institute of Technology, Cambridge, MA.
- 2016. Boudell, J.A. Ecology app development as a tool for research, education, and outreach. Ecology and cyberlearning: Inherent paradox or rich with potential? Ecological Society of America, Fort Lauderdale, FL.
- 2015. Boudell, J.A., Jacobo, J.M. Resiliency and flexibility: urban stream restoration in uncertain times. Future-proof wetlands? Wetland adaptations to climate extremes. Society of Wetland Scientists, Providence, RI.
- 2014. Boudell, J.A., Jacobo, J.M. Urban stream restoration in the Georgia Piedmont: Policy, practice, and novel ecosystems. Hydrologic and vegetative restoration of urban affected parks: approaches and outcomes session. Conference on Ecological and Ecosystem Restoration, New Orleans, LA.
- 2013. Boudell, J.A., Jacobo, J.M. Urban stream restoration in a changing world: Alternative pathways in the Southern Piedmont USA. Restoring functional riparian ecosystems: Concepts and Applications Symposium. World Conference on Ecological Restoration, Madison, WI.
- 2013. Boudell, J.A. and C.H. Tang. Eco Hackathon: A confluence of ecology and hacker culture. MIT App Inventor Summit, Massachusetts Institute of Technology, Cambridge, MA.
- 2013. Boudell, J.A. CSU SEEDS: a catalyst for the future of ecology. Lake Spivey Rotary Club, Jonesboro, GA.
- 2007. Stromberg, J.C., Hazelton, A., White, M., *Boudell, J., White, J., and D. Shorrock. Restoration potential of dewatered riparian ecosystems: role of seed banks. Restoration of western riparian ecosystems: Challenges and solutions OOS. Ecological Society of America/Society for Ecological Restoration joint meeting, San Jose, CA.
- 2003. Stromberg, J.C., Lite, S., Beauchamp, V. and *J.A. Boudell. Managing stream flow regimes for riparian ecosystem restoration. California Invasive Plant Council, Kings Beach, CA.
- 2000. Boudell, J.A. Assessing and using seed banks in riparian restoration. Arizona Water Protection Fund Information Transfer Forum, Phoenix, AZ.
- 1999. Boudell, J.A. and J.C. Stromberg. Coupling ground-water and riparian vegetation models to simulate impacts of a reservoir release and the role of the seed bank in maintaining biodiversity in southwestern riparian ecosystems. West Valley Water Forum sponsored by the Agua Fria-New River Natural Resource Conservation District and the Bureau of Reclamation. AZ.

Invited Panel Participation

- 2014. Recent trends of research methodology in America, Department of History, Birla College of Arts, Science, and Commerce, Kalyan, India. Visiting Professor.
- 2007. How to succeed in ecology: Advice from professionals. Ecological Society of America, San Jose, CA.
- 2007. Science Career Panel, Session Chair, Clayton State University, Morrow, GA.
- 2001. 1st year Preparing Future Faculty Panel, Arizona State University, Tempe, AZ.
- 2002. Graduate Student Panel, Grand Canyon University, Phoenix, AZ.
- 2002. Role of the Post Doc in Science Careers, Session Chair, Arizona State University, Tempe, AZ.
- 2001. Preparing future faculty and professionals, The Way Up Conference for University Women, Mesa, AZ.

Contributed Presentations (*undergraduate student)

2014. Boudell, J.A., *Mikula, J.M., and W.D. Belonoha. Dit Da Jow: Iron hit wine in Traditional Chinese medicine. Joint conference of the Society of Ethnobiology and Society for Economic Botany, Cherokee, NC.
2013. Boudell, J.A., Hornbuckle, S.F., and J.M. Mikula*. Analysis of secondary metabolites in *Carpinus caroliniana* and *Ostrya virginiana*. Southeast Regional Meeting of the American Chemical Society. Atlanta, GA (poster).
2013. Jacobo, J.M. and J.A. Boudell. Soil properties of urban streams along a restoration gradient in the Southern Piedmont. Ecological Society of America, Minneapolis, MN.
2013. *Mikula, J., *Mitchell, K. and J.A. Boudell. Impact of soil nitrogen and tree canopy cover on *Microstegium vimineum* in a restored urban Piedmont stream. Ecological Society of America, Minneapolis, MN (poster).
2012. Boudell, J.A. and J.C. Stromberg. Impact of varying nitrate concentrations on germination of a suite of semi-arid region riparian plant species. Ecological Society of America, Portland, OR.
2011. Boudell, J.A., *Fariñas, S. and J. Jacobo*. Is urban stream restoration possible or is reclamation a more realistic goal? Case study: East Jesters Creek in Clayton County, Georgia. Southeastern Chapter of the Society for Ecological Restoration Symposium, Quincy, FLA.
2010. Boudell, J.A. and J.C. Stromberg. Impacts of disturbance intensity on *Prosopis* understory competition and diversity. Ecological Society of America, Pittsburgh, PA.
2010. Stromberg, J.C., Hazelton, A. and J.A. Boudell. Seed bank dynamics of arid region streams and implications for restoration. 3rd International Society for Seed Science meeting, Salt Lake City, UT.
2009. *Fariñas, S. and J.A. Boudell. An evaluation of the Jester's Creek restoration project: vegetation. Ecological Society of America, Albuquerque, NM (poster).
2008. Boudell, J.A. Integrated ecology education: Research as service learning in undergraduate ecology labs. Ecological Society of America, Milwaukee, WI.
2008. *Jacobo, J.J. and J.A. Boudell. Evaluation of the restoration at East Jesters Creek: Soil nutrients. Ecological Society of America, Milwaukee, WI (poster).
2007. Boudell, J.A. and J.C. Stromberg. Riparian legacies in propagule banks of a dewatered dryland riparian ecosystem. Italian Ecological Society, Ancona, Italy (poster).
2007. Boudell, J.A., Hazelton, A. and J.C. Stromberg. Soil manipulation as a tool to understand propagule dynamics in dryland riparian ecosystems. Ecological Society of America, San Jose, CA (poster).
2007. Hazelton, A., Boudell, J., and J.C. Stromberg. Life history traits of seed-banking species in a desert riparian ecosystem. Society of Wetland Scientists, Sacramento, CA (poster).
2006. Boudell, J.A. and J.C. Stromberg. Spatiotemporal metacommunity dynamics support biodiversity in a highly dynamic floodplain. Italian Ecological Society, Viterbo, Italy (poster).
2006. Boudell, J.A. and J.C. Stromberg. Insurance in the face of rapid spatiotemporal dynamics in a southwestern riparian metacommunity. Ecological Society of America, Memphis, TN.

- 2005. Boudell, J.A. and J.C. Stromberg. Riparian metacommunities: propagule banks and species diversity in an arid-region riparian ecosystem. Ecological Society of America, Montreal, Canada.
- 2003. Boudell, J.A. and J.C. Stromberg. Riparian seed banks: Potential contribution to restoration of an impounded and dewatered ecosystem of Southwestern USA. Ecological Society of America, Savannah, GA.
- 2003. Boudell, J.A. and J.C. Stromberg. Role of the seed bank in restoring biodiversity to riparian ecosystems of Southwestern North America. Society of Wetland Scientists, New Orleans, LA.
- 2002. Boudell, J.A. and J.C. Stromberg. Role of the seed bank in maintaining biodiversity in a Southwestern riparian ecosystem. Ecological Society of America, Tucson, AZ.
- 1999. Boudell, J.A. and J.C. Stromberg. Role of the Seed Bank in Maintaining Biodiversity in Southwestern Riparian Ecosystems: Cool Season Results. Society of Wetland Scientists, Norfolk, VA.
- 1995. Boudell, J.A. and S.O. Link. Variation in semi-arid soil seed banks. Ecological Society of America, Snowbird, UT (poster).

Workshops Given and Hackathons Organized

- 2018. Simple app development for wetland ecologists. Annual meeting of the Society of Wetland Scientists, Denver, CO.
- 2017. Using AppVis to build data-rich apps with MIT App Inventor. ASM SIGCSE, Seattle, WA.
- 2017. Eco Hackathon. Ecology app creation, Clayton State University, Morrow, GA.
- 2016. Simple App Creation using MIT App Inventor. Outdoor Learning Symposium, Environmental Education Alliance of Georgia, Atlanta, GA.
- 2016. Expedition_Hack: the environment. MIT App Inventor Summit, MIT Media Lab, Massachusetts Institute of Technology, Cambridge, MA.
- 2016. Eco Hackathon. Ecology app creation, Annual meeting of the Ecological Society of America, Fort Lauderdale, FL.
- 2016. Simple App Creation for Ecologists using MIT App Inventor. Annual meeting of the Ecological Society of America, Fort Lauderdale, FL.
- 2016. Eco Hackathon. Ecology app creation, Clayton State University, Morrow, GA.
- 2015. Simple App Creation for Ecologists using MIT App Inventor. Annual meeting of the Ecological Society of America, Baltimore, MD.
- 2015. Eco Hackathon. Ecology app creation, Annual meeting of the Ecological Society of America, Baltimore, MD.
- 2015. MIT App Inventor Workshop. Center for Instructional Development, Clayton State University, Morrow, GA.
- 2015. Eco Hackathon. Ecology app creation, Clayton State University, Morrow, GA.
- 2014. MIT App Inventor Workshop. Birla College, Kalyan, India. Visiting Professor.
- 2014. MIT App Inventor Workshop Series. Center for Instructional Development, Clayton State University, Morrow, GA.
- 2014. Simple App Creation for Ecologists using MIT App Inventor: Let's build apps! Annual meeting of the Ecological Society of America, Sacramento, CA.
- 2014. Simple App Creation for Ecologists using MIT App Inventor: Introduction. Annual meeting of the Ecological Society of America, Sacramento, CA.
- 2013. MIT App Inventor Workshop. Center for Instructional Development, Clayton State University, Morrow, GA.
- 2013. Eco Hackathon. Ecology app creation, Clayton State University, Morrow, GA.

2005. Collaborative Learning Workshop. Center for Instructional Development, Clayton State University, Morrow, GA.

Other Presentations

2010. Boudell, J.A. Floodplain metacommunity dynamics and floodplain restoration. NSF WEBS Symposium, Eatonville, WA (poster).
2010. Boudell, J.A. Wetware hacking: ecosystems. Freeside Atlanta. Atlanta, GA.
2010. Boudell, J.A. Searching for alien plants. Freeside Atlanta. Atlanta, GA.

Campus Presentations

2017. Boudell, J.A. Ecology app development as a tool for research, education, and outreach. Biology Seminar, Clayton State University, Morrow, GA.
2013. Boudell, J.A. CSU SEEDS and Stream Restoration. Earth Day: So What?? Service Learning Series. Clayton State University, Morrow, GA.
2012. Jacobo, J.M. and J.A. Boudell. Understanding mycorrhizae: restoration and urbanization. Biology Seminar, Clayton State University, Morrow, GA.
2012. Boudell, J.A., Fariñas, S., and J.M. Jacobo. Is urban stream restoration possible or is reclamation a more realistic goal? Case study: East Jesters Creek in Clayton County, Georgia. Biology Seminar, Clayton State University, Morrow, GA
2011. Norflus, F., Kodani, C. and J. Boudell*. Student-faculty research: moving science and careers forward. Faculty Development Day, Clayton State University, Morrow, GA.
2010. Metacommunity dynamics in unpredictable riparian ecosystems. Biology Seminar, Clayton State University, Morrow, GA.
2008. Boudell, J.A. Global Warming Discussion. CSU Political Science Association and the Clayton State Science Association Sponsored event, Clayton State University, Morrow, GA.
2007. Boudell, J.A. and N. Palazzo. Universally design your courses to engage all students. Faculty Development Day, Clayton State University, Morrow, GA.
2007. Boudell, J.A. Study Abroad: Montepulciano, Italy Summer 2008. 53 recruitment presentations, Clayton State University, Morrow, GA.
2006. Miller, A., *Boudell, J., Medastin, J., Brackett, L. and E. Manglitz. Universal web design for a diverse audience. Faculty Development Day, Clayton State University, Morrow, GA.
2006. Linking theory to empirical knowledge: metacommunity theory development in riparian ecosystems. Frontiers in Science, Department of Natural Sciences, Clayton State University, Morrow, GA.
2005. Boudell, J.A. Collaborative learning in undergraduate biology classrooms. Faculty Development Day, Clayton State University, Morrow, GA.
2005. Riparian Metacommunities: Propagule Banks as Refugia for Understory Diversity in Southwestern Riparian Ecosystems. Frontiers in Science, Department of Natural Sciences, Clayton State University, Morrow, GA.

Media Interactions

2016. Nagendra, U. Augmenting the reality of ecology education. (August 31). [PLOS Ecology Community Blog post].
<http://blogs.plos.org/ecology/2016/08/31/augmenting-the-reality-of-ecology-education/>

2015. Miller, S. Oh, the things you can do... with technology! (August). [Science Scene Magazine]. http://www.forestry-suppliers.com/Promo/15_email/2015_ScienceScene_Aug24.html

TEACHING AND SUPERVISED PROJECTS

Graduate Courses Taught

2015-present. Clayton State University

Science and Society, Conservation Biology

Undergraduate Courses Taught

2004-present. Clayton State University

Majors

Principles of Biology I, Principles of Biology I Laboratory, Introductory Plant Biology, Environmental Studies, Evolution and Population Biology, Ecology, Ecology Laboratory, Plant Physiology, Plant Taxonomy, Economic Botany, Biology Seminar

Non-Majors

Introductory Biology I, Introductory Biology I Laboratory, Introductory Biology II, Plants and Society, Environmental Science

2003. Mesa Community College

Majors

Environmental Biology

1997-2003. Graduate Teaching Assistant, Arizona State University.

Majors

General Biology I Laboratory, Plant Ecology: Organisms and Populations Laboratory, Computer Applications in Biology

Non-majors

Concepts in Plant Biology Laboratory,

Undergraduate Research Projects (non-thesis) and Internships

K. Thomas. Consulting: the environmental consulting game app. 2018.

ML. Li. GamEcology: the eco-friendly app that teaches. 2018.

E. Madubuike. SEEDS ecology and social media internship. 2017.

N. Bracey. Plant identification and herbarium collections internship. 2017.

A. Blanton. An evaluation of the Jesters Creek restoration project: vegetation. 2016-2017.

D. Jolly. An evaluation of the Jester Creek restoration project: soil. 2016-2017.

D. Boatwright. Plant identification and herbarium collections internship. 2016.

C. Caldwell. English Ivy management on an urban preserve in the Georgia Piedmont. 2016.

A. Blanton. Plant identification and herbarium collections internship. 2016.

- B. Anderson. Reynolds Nature Preserve eGuide App. 2015.
D. Viera. Reynolds Nature Preserve eGuide App. 2015.
I. Yi. "Use of nanotechnology to mitigate instream nitrate pollution." 2015.
K. Turner. "Medicinal properties of *Vaccinium* sp. (blueberry)." 2014-2015.
J. Mikula. "Phylogenetic relationships of *Ostrya virginiana* and *Carpinus caroliniana* using secondary metabolites." 2013.
J. Mikula. "Controlling factors on *Microstegium vimineum* in a restored Piedmont riparian ecosystem." 2013.
K. Mitchell. "Controlling factors on *Microstegium vimineum* in a restored Piedmont riparian ecosystem." 2013.
J. Mikula. Plant identification and herbarium collections internship. 2012-2013.
K. Mitchell. Soil sampling techniques and analysis internship. 2012.
C. Mattice. Plant identification and herbarium collections internship. 2012.
T. Silva. "An evaluation of the Jesters Creek restoration project: soils 7 years later." 2011-2012.
M. Hanft. Plant identification and herbarium collections internship. 2011-2012.
T. Silva. Seed ecology and greenhouse internship. 2011.
J. Morrow. Seed ecology and greenhouse internship. 2011.
B. Patton. "Vertical height diversity and potential bird species richness in a restored Piedmont riparian ecosystem." 2010-2011.
B. Patton. Plant identification and herbarium collections internship. 2009-2011.
M. Hanft. Seed ecology, experimental design, and greenhouse internship. 2010.
J. Thompson. "Metacomunities: testing dispersal in a southwestern riparian ecosystem." 2009.
A. Nguyen. "Germination of southwestern riparian species." 2008.
J. Jacobo. Seed and soil ecology internship. 2007-2008.
S. Fariñas. "An evaluation of the Jesters Creek restoration project: vegetation." 2006-2007.
J. Jacobo. "An evaluation of the Jesters Creek restoration project: soils." 2006-2007.
S. Fariñas. Plant identification and herbarium collections internship. 2006-2007.
R. Holmes. Flora of Reynolds Nature Preserve and Plant identification and herbarium collections internship. 2006-2007.
M. Terrell. Plant identification and herbarium collections internship. 2005-2006.
J. Smith. Experimental design and analysis in ecology internship. ASU. 2002-2003.
A. Davis. Plant ecology field methods internship. ASU. 2001-2003.
T. Hawks. "Mycorrhizae density in *Prosopis* forests." High school research mentor through the SCENE Science Research Experiences for High School Students, ASU, 2000-2001.
M. Guell. Plant identification and herbarium collections internship. ASU. 1999-2000.

Honors Projects

- D. Jackson. Forensic Ecology. 2015.
A. Barrett. Forensic Botany. 2014.
V. Duong. The use of plants in modern medicine. 2011.
J. Cashmir. Plant biology in everyday life blog. 2009.

Graduate Committee Co-Chaired

- J. Jacobo. M.S., Soil properties of urban streams along a restoration gradient in the Piedmont. Department of Biology, University of Alabama at Birmingham. 2014.

SERVICE TO PROFESSION

Journal Editor

- 2017- Society of Wetland Scientists, New Media, Mobile App Editor. current.
- 2009- Natural Areas Journal, Associate Editor for Ecology. 2018.
- 2000- The Arizona Riparian Council, Noteworthy Publications Editor. 2003.

Journal Review

Applied Vegetation Science, Aquatic Sciences, Arid Land Research and Management, Biological Invasions, Botany, Ecohydrology, Ecological Engineering, Ecological Research, Ecology, Ecosystem Health and Sustainability, Environmental Practice, Freshwater Biology, Frontiers in Ecology and the Environment, Journal of Applied Ecology, Journal of Arid Environments, Journal of the Torrey Botanical Society, Journal of Vegetation Science, MADROÑO, Natural Areas Journal, Plant Ecology, Restoration Ecology, River Research and Applications, Wetlands

Consulting

- 2015. PPT Lectures. *Biology: How Life Works 2cd*. W.H. Freeman Publishers.
- 2014. Clicker Questions. *Biology for a Changing World*. W.H. Freeman Publishers.
- 2014. Textbook review. *Principles of Biology*. Nature Education/Macmillan.
- 2012. Textbook review. *Biology: How Life Works*. W.H. Freeman Publishers.
- 2010. U.S.G.S. National Wetlands Research Center, Key Note Speaker presentation review.
- 2010. Textbook review. *Economic Botany*. McGraw-Hill Publishers.
- 2010. Textbook review. *Biology: How Life Works*. W.H. Freeman Publishers.
- 2010. Book review. *Writing Papers in the Biological Sciences*. Bedford/St.Martin's.
- 2002. Tres Rios Harvest Nursery, Ecology Consultant, Greeley and Hansen Engineers.

Other Professional Service

- 2016- Society of Wetland Scientists New Media Committee. Present.
- 2006- Ecological Society of America SEEDS Program, campus chapter advisor. present.
- 2012- Society of Wetland Scientists Student Grant Subcommittee. 2014.
- 2012. CSU SEEDS Mini-Research Conference organizer and faculty mentor, Asheville, NC.
- 2009. SEEDS selected program faculty mentor for the 2009 Mt. Lake Biological Station field trip, Ecological Society of America SEEDS Program.
- 2006. SEEDS selected program faculty mentor for the 2006 Coweeta LTER field trip, Ecological Society of America SEEDS Program.
- 2006. Ecological Society of America Buell-Braun Student Award, Presentation Judge, Memphis, TN.

- 2005. Ecological Society of America Buell-Braun Student Award, Presentation Judge, Montreal, Canada.
- 2002. 16th Annual meeting of the Arizona Riparian Council, Hassayampa River Preserve Tour, Wickenburg, AZ.
- 2001. Graduate Research Exposition, Presentation Judge, Arizona State University, Tempe, AZ.

UNIVERSITY SERVICE ACTIVITIES

Selected Committee Assignments

- 2015-present. Chair, Institute of Integrated Science and Technology Committee
- 2015-present. Birla College Faculty Exchange Program Committee
- 2014-present. Chair, Graduate Curriculum Subcommittee to the Arts & Sciences Committee
- 2014-present. Arts & Sciences Scholar of the Year Committee
- 2012-present. Clayton State University Campus Tree Committee
- 2013-2016. Chair, M.S. in Applied Biology Development Committee
- 2015. Director, spring 2015 Birla College Faculty Exchange Program
- 2011-2014. Graduate Curriculum Subcommittee to the Arts & Sciences Committee
- 2011-2012. Undergraduate Research Committee
- 2011-2012. Chair, Recruitment Committee
- 2006-2012. Recruitment Committee
- 2010-2011. Science Building Design Team
- 2005-2009. Laboratory Safety Committee
- 2005-2008. University Curriculum and Academic Policy Council
- 2005-2006. University Web Accessibility Committee
- 2005. College of Arts and Sciences Smith Award Committee
- 2004. Substitute member, Faculty Council –October
- 2003-2004. ASU School of Life Sciences Web Page Development Committee
- 2001-2002. ASU Preparing Future Faculty Steering Committee
- 2001. Guest Speaker Committee, ASU Preparing Future Faculty Lecture Series

Association/Club Sponsor

- 2005-present. Mentor, Ecological Society of America Strategies for Ecology Education, Diversity, and Sustainability (ESA SEEDS) campus chapter.
- 2004. Co-Sponsor, Clayton State Science Association.

COMMUNITY SERVICE ACTIVITIES

Outreach

- 2017. Fernbank Museum's Science at Hand Day. Ecology Education.
- 2016. Fernbank Museum's Science at Hand Day. Ecology Education.
- 2016. Reynolds Nature Preserve Azalea Festival. CSU SEEDS Ecology Education.
- 2015. Fernbank Museum's Science at Hand Day. Ecology Education.
- 2015. Scientist in the Classroom. Babb Middle School. Forest Park, GA.
- 2015. Reynolds Nature Preserve Azalea Festival. CSU SEEDS Ecology Education.
- 2013. Fernbank Museum's Science at Hand. Ecology Education.
- 2013. "Unification of life: The modern synthesis," a workshop for Clayton County middle

- school teachers, Clayton County Mathematics and Science Bridge Program.
- 2013. Reynolds Nature Preserve Azalea Festival. CSU SEEDS Ecology Education.
 - 2013. Yell Academy STEMology Day, "Ecology is in Control." science activity for middle and high school students.
 - 2012. Lee Street Elementary School Science Night. CSU SEEDS Ecology Education.
 - 2012. Reynolds Nature Preserve Azalea Festival. CSU SEEDS Ecology Education.
 - 2009. McNair Learning Academy. CSU SEEDS chapter students led an ecology discussion and food web game.
 - 2007. Mentored Science Fair project of student, "Does the Effect of Gibberellic Acid Induce Variation in Soybean Productivity Based upon the Way it is Administered?"
 - 2005. Griffen-Resa Ecology Workshop, a plant ecology workshop for middle school teachers.
 - 2005. Honors Middle School Science Day at Clayton State University, a plant evolution activity for honors middle school students.
 - 2004- NSF GK-12 Fellowship, wrote inquiry-based lesson plans and taught 7th – 8th grade science two days per week at Valley View Elementary in Phoenix, AZ.
 - 2003. Rio Salado Restoration Project, mentored and trained elementary school students and undergraduate students in Ecology Explorers protocol to use at a high-priority riparian restoration site.
 - 2004- Service Learning Co-Instructor. Arizona State University, mentored undergraduate students in improving teaching techniques and developing lesson plans for elementary school classrooms at Valley View Elementary.
 - 2003. Exhibitor at Explorathon AZ –an event to encourage young girls in science, American Association of University Women, Creighton School District, and Gateway Community College.
 - 2001. Mentor workshop facilitator for the SCENE program – Science Research Experiences for High School Students.

Other Community Service

- 2017. Reynolds Nature Preserve Spring Ivy Pull.
- 2016. Reynolds Nature Preserve Spring Ivy Pull.
- 2015. Reynolds Nature Preserve Fall Ivy Pull.
- 2015. Reynolds Nature Preserve Spring Ivy Pull.
- 2014. CCWA Camp Creek River restoration project.
- 2014. Reynolds Nature Preserve Ivy Pull.
- 2013. Reynolds Nature Preserve Ivy Pull.
- 2012. Reynolds Nature Preserve Ivy Pull.
- 2008. Judge, Clayton regional Science and Engineering Fair.
- 2008. Judge, Henry regional Science and Engineering Fair.
- 2006. Judge, Clayton regional Science and Engineering Fair.
- 2006. Judge, Henry regional Science and Engineering Fair.
- 2006. Vice President, Reynolds Memorial Nature Preserve Board.
- 2005. Judge, Clayton regional Science and Engineering Fair.
- 2004. Judge, Fayette County High School Science Fair.
- 2004. Judge, Central Arizona Regional Science and Engineering Fair.
- 2003. Judge, Central Arizona Regional Science and Engineering Fair.

ADDITIONAL PROFESSIONAL DEVELOPMENT

- 2015. STEM Symposium: Embedded Research in Undergraduate Courses. Duluth, GA.
- 2015. Community Engagement Workshop Series, Center for Instructional Development, Clayton State University, Morrow, GA.
- 2015. US Army Corp of Engineers Regulatory Boot Camp, Morrow, GA.
- 2013. MIT App Inventor Workshop, University of Massachusetts-Lowell, MA.
- 2013. Mixed Models in Ecology and R, 7-day Workshop, Harvard Forest, Harvard University, MA.
- 2012. Developing a Primer for Undergraduate Research, Ecological Society of America, Portland, OR.
- 2010. NSF ADVANCE WEBS (Women Evolving the Biological Sciences) Symposium, Closed 3-day symposium, Eatonville, WA.
- 2007. Promoting an Undergraduate Research Culture, Inside Higher Ed Teleconference, Morrow, GA.
- 2006. Service Learning Workshop, Center for Instructional Development, Clayton State University, Morrow, GA.
- 2005. Pathways to Scientific Learning, Ecological Society of America, Montreal, Canada.
- 2005. Problem-Based Learning Workshop, Center for Instructional Development, Clayton State University, Morrow, GA.
- 2005- Collaborative Learning Fellowship, in-depth collaborative learning workshop series, Center for Instructional Development, Clayton State University, Morrow, GA.
- 2004. Collaborative Learning Workshop, Center for Instructional Development, Clayton State University, Morrow, GA.
- 2004- NSF GK-12 Fellowship, workshop series on implementing inquiry-based science, Arizona State University, Tempe, AZ.
- 2003. Inquiry-Based Science – Integration of Research with Education, Arizona State University, Tempe, AZ.
- 2003. Active Learning with Technology workshop series resulting in a “Certificate of Completion in Active Learning with Technology”, Arizona State University, Tempe, AZ.
- 2002- Preparing Future Faculty seminar series, in-depth faculty training workshop series, Arizona State University, Tempe, AZ.
- 2000. series, Arizona State University, Tempe, AZ.
- 2001. Microcomputers in Education Conference, Arizona State University, Tempe, AZ.

PROFESSIONAL MEMBERSHIPS

- 1995- Ecological Society of America, Chapter Affiliations: Education, Researchers at Undergraduate Institutions, Southeastern
- 1995- Society for Ecological Restoration
- 1999- Society of Wetland Scientists
- 2014- Society for Ethnobiology
- 2015
- 2009- Società Italia di Ecologia
- 2007.
- 2006- Sigma Xi, The Scientific Research Society
- 1995.