**D. J. Eastburn**

**Address** Department of Plant Sciences **Voice** 530-400-2121

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University of California

Davis, CA 95616-8780

**Education**

M.S. Soils & Biogeochemistry, University of California, Davis, December 2014. “*Quantifying Tradeoffs, Synergies, and Supply of Multiple Ecosystem Services in a Mediterranean Oak Woodland Landscape*.”

B.S. Biological Sciences with an emphasis in Evolution, Ecology, and Biodiversity, University of California, Davis, September 2009.

**Relevant experience**

**University of California-Davis**, Davis, CA, 12/2014 - present.

**Assistant Specialist,** Rangeland Watershed Laboratory**,** Department of Plant Sciences.

* Provide leadership, technical expertise, and specialized experience for the development, implementation, and analyses of experiments, including multiple ecosystem services response to adaptive management strategies, irrigated pasture enhancement, mountain meadow management and microbial water quality.
* Develop extension and research information hub including web applications to support grazingland management decision making and regulatory compliance for producers and land managers. [rangelands.ucdavis.edu](file:///C:\Users\djeastbu\Desktop\2017%20MP%20Package\rangelands.ucdavis.edu)

**University of California-Davis**, Davis, CA, 9/2012 – 11/2014.

**Graduate Student Researcher,** Department of Plant Sciences.

* Led field coordination, data collection efforts, and database development and management for large-scale adaptive grazing management experiment.
* Lead cross sectional, longitudinal study of soil nutrient fluxes, moisture, and temperature to provide insight into forage production, invasive species resistance, and plant diversity responses across a woodland management gradient.
* Collaborated with UC Cooperative Extension advisors and specialists to develop an online, interactive information center on rangeland microbial water quality.

**University of California-Davis**, Davis, CA, 9/2009 – 9/2012.

**Junior Specialist,** Department of Plant Sciences.

* Oversaw operations of multiple research projects, managed field crews in implementation and maintenance of project infrastructure, and trained and supervised laboratory members in soil and water sample analyses.
* Developed and managed field and laboratory databases, created public outreach content, managed laboratory webpage, and synthesized and analyzed results for conference proceedings.

**University of California-Davis**, Davis, CA, 9/2006 – 8/2009.

**Student Research Assistant,** Department of Plant Sciences.

* Led research projects investigating patterns of organic matter decomposition and denitrification in Sierra Nevada meadow soils.
* Conducted sample collection and laboratory analyses of vegetation, soil, and water quality samples for multiple research projects.

**Publications**

Byrnes R., **D.J. Eastburn**, K.W. Tate, L.M Roche. *In review.* Do livestock grazing regimes influence soil biogeochemical processes and function? A global analysis of grazing effects on soil carbon sequestration and nitrogen cycling in rangelands. *Journal of Environmental Quality*

**Eastburn D.J.**, L.M. Roche, M.P. Doran, G. Gamble, E.S. Gornish. *In review.* Plant Seeding for Multiple Ecosystem Service Goals. *Journal of Environmental Management*.

Salls W.B., D.J. Lewis, R.E. Larsen, L.M. Roche, **D.J. Eastburn**, A.D. Hollander, K.W. Tate, A.T. O’Geen. *In Review.* Modeled Soil Erosion Potential is Low across California’s Annual Rangelands. *California Agriculture.*

George, M.R., **D.J. Eastburn**, L.M. Roche. *In Press.* Ecosystem Services. In: M.R. George, *Ecology and Management of Annual Rangelands*.

**Eastburn D.J.,** A.T. O’Geen, K.W. Tate, L.M. Roche. 2017. Multiple ecosystem services in a working landscape. PLoS ONE 12(3): e0166595.

Roche, L.M., A.T. O’Geen, A.M. Latimer, **D.J. Eastburn**. 2014. Montane meadow hydropedology, plant community, and herbivore dynamics. Ecosphere 5:art150.

Roche, L.M., A.J. Latimer, **D.J. Eastburn**, K.W. Tate. 2012. Cattle grazing and conservation of a meadow-dependent amphibian species in the Sierra Nevada. PLoS ONE 7(4): e35734.

Roche, L.M., B. Allen-Diaz, **D.J. Eastburn**, K.W. Tate. 2012*.* Cattle grazing and Yosemite toad (*Bufo canorus* Camp) breeding habitat in Sierra Nevada meadows. Rangeland Ecology and Management*.* 65:56-65.

**Abstracts and presentations**

**Eastburn D.J.,** K.W. Tate, L.M. Roche. Adaptive grazing management for multiple ecosystem services. 102nd Annual Meeting of the Ecological Society of America. Portland, OR 6-11 Aug 2017.

Roche L.M., K.W. Tate, J.D. Derner, A.J. Smart, T.P. Toombs, D. Larsen, R.L. McCulley, J. Goodwin, S. Sims, R. Byrnes, **D.J. Eastburn**. Grazing management for healthy soils. Society for Range Management California-Pacific Section Biannual Meeting and Technical Tour. Suisun, CA 4-5 April 2017.

**Eastburn D.J.**, L.M. Roche, K.W. Tate. Annual Rangeland Weed Response to Adaptive Grazing Management in a Drought Stricken California. 70th Annual Meeting of the Society for Range Management. St. George, UT 29 Jan – 2 Feb 2017.

**Eastburn D.J.**, L.M. Roche, M.P. Doran, E.S. Gornish. Seeding Functional Redundancy for Multiple Ecosystem Service Goals. 70th Annual Meeting of the Society for Range Management. St. George, UT 29 Jan – 2 Feb 2017.

DeRose K.L., L.M. Roche, D.F. Lile, **D.J. Eastburn**, E. Fulstone, K.W. Tate Water Quality Conditions Associated With Livestock, Recreation, and Residences on Multiple-Use Landscapes. 70th Annual Meeting of the Society for Range Management. St. George, UT 29 Jan – 2 Feb 2017.

**Eastburn D.J.**, L.M. Roche, K.W. Tate. Adaptive Grazing Management in a Drought Stricken California. 100th Annual California Cattlemen’s Convention Sparks, NV 1-3 Dec 2016.

**Eastburn D.J.**, L.M. Roche, M.P. Doran, E.S. Gornish. Seeding Functional Redundancy for Multiple Ecosystem Service Goals. 100th Annual California Cattlemen’s Convention Sparks, NV 1-3 Dec 2016.

**Eastburn D.J.**, L.M. Roche, M.P. Doran, E.S. Gornish. Seeding Functional Redundancy for Multiple Ecosystem Service Goals. California Invasive Plant Council 25th Annual Symposium. Yosemite, CA 2-5 Nov 2016.

**Eastburn D.J.**, L.M. Roche, M.P. Doran, E.S. Gornish. Seeding Functional Redundancy for Multiple Ecosystem Service Goals. Society for Range Management California-Pacific Section Biannual Meeting and Technical Tour. Volcano, HI 26-27 Oct 2016.

**Eastburn D.J.**, L.M. Roche, A.T. O’Geen, K.W. Tate. Quantifying Synergies and Tradeoffs of Ecosystem Services across a Gradient of Oak Management. 69th Annual Meeting of the Society for Range Management. Corpus Christi, TX: 31 Jan-4 Feb 2016.

**Eastburn, D.J.,** L.M. Roche, A.J. Latimer, K.W. Tate . Cattle Grazing and Conservation of a Meadow-Dependent Amphibian Species in the Sierra Nevada. 3rd Rustici Rangeland Science Symposium. Davis, CA: March 3-4, 2015.

**Eastburn, D.J.**, L.M. Roche, A.T. O’Geen, K.W. Tate. Multiple ecosystem service outcomes across a gradient of oak woodland management. 7th California Oak Symposium: Managing Oak Woodlands in a Dynamic World. Visalia, CA: 3-6 Nov 2014.

Roche, L.M., J. Chang, J. Six, A.T. O’Geen, **D.J. Eastburn**, K.W. Tate. Managing for multiple ecosystem services—Soil organic carbon stability across an oak agroecosystem. 7th California Oak Symposium: Managing Oak Woodlands in a Dynamic World. Visalia, CA: 3-6 Nov 2014.

**Eastburn, D.J.**, Soils relationship with land use, carbon sequestration & climate change: Insight for watershed restoration. Point Blue Conservation Science STRAW Project, Annual Watershed Week. Novato, CA: 6 Aug 2013.

**Eastburn, D.J.**, L.M. Roche, K.W. Tate. Herbaceous plant diversity and productivity relationships across multiple states of an oak woodland-annual grassland system. 65th Annual Meeting of the Society for Range Management. Spokane, WA: 29 Jan-3 Feb 2012.

**Eastburn, D.J.**, L.M. Roche, K.W. Tate. Plant diversity and productivity relationships across a California hardwood rangeland. 1st Annual Rangeland Science Symposium. Davis, CA: 19 Jan 2012

Roche, L.M., A.M. Latimer, **D.J. Eastburn**, K.W. Tate. Cattle grazing and sensitive wildlife species conservation in Sierra Nevada mountain meadows. 64th Annual Meeting of the Society for Range Management.Billings, MT:6-11 Feb 2011.

**Eastburn, D.J.**, L.M. Roche, and K.W. Tate. Investigation of relationships between livestock utilization and Yosemite toad (*Bufo canorus*) occupancy in montane meadows of the Sierra Nevada. 63rd Annual Meeting of the Society for Range Management and the 50th Annual Meeting of the Weed Science Society of America**.** Denver, CO: 5-11 Feb 2010.

Roche, L.M., K.W. Tate, **D.J. Eastburn**, A.J. Lind, and R. Grasso. Effects of cattle grazing, water quality attributes and hydrologic conditions on occupancy of Yosemite toad (*Bufo canorus*) breeding habitat in Sierra Nevada mountain meadows. 63rd Annual Meeting of the Society for Range Management and the 50th Annual Meeting of the Weed Science Society of America. Denver, CO: 5-11 Feb 2010.

Roche, L.M., K.W. Tate, A.T. O’Geen and **D.J. Eastburn**. Identifying relationships between livestock grazing, plant community characteristics and soil attributes in central Sierra Nevada meadows. 62nd Annual Meeting of the Society for Range Management. Albuquerque, NM: 8-12 Feb 2009.

Roche, L.M., K.W. Tate, A.T. O’Geen and **D.J. Eastburn**. Denitrification as a function of moisture gradients and annual livestock utilization in upper montane meadows of the central Sierra Nevada. 62nd Annual Meeting of the Society for Range Management. Albuquerque, NM: 8-12 Feb 2009.

**Publication Acknowledgements**

Oles, K.M., D.A. Weixelman, D.F. Lile, K.W. Tate, L.K. Snell, and L.M. Roche. 2017. Riparian Meadow Response to Modern Conservation Grazing Management. Environmental management.

Gornish E.S., and P. Ambrozio dos Santos. 2016. Invasive species cover, soil type and grazing interact to predict long-term grassland restoration success. Restoration Ecology 24: 222-229

Roche, L.M. 2016. Adaptive rangeland decision-making and coping with drought. Sustainability 8: 1334.

Roche, L.M., J.F. Chang, J. Six, A.T. O’Geen, K.W. Tate. 2015. Soil organic carbon stability across a Mediterranean oak agroecosystem. Proceedings of the Seventh Symposium on Oak Woodlands: Managing Oak Woodlands in a Dynamic World. PSW-GTR 251.

Roche, L.M., T.K. Schohr, J.D. Derner, M.N. Lubell, B.B. Cutts, E. Kachergis, V.T. Eviner, K.W. Tate.2015. Sustaining working rangelands: Insights from rancher decision making Rangeland Ecology & Management 68(5):383-389. doi: http://dx.doi.org/10.1016/j.rama.2015.07.006

Freitas, M., L.M. Roche, D.W. Weixelman, K.W. Tate. 2014. Montane meadow plant community response to grazing. Environmental Management 54: 301-308

Roche, L.M., Kromschroeder, L., E.R. Atwill, R.A. Dahlgren, K.W. Tate. 2013. Water quality conditions associated with cattle grazing and recreation on national forest lands. PLOS ONE 8(6): e68127.

**Professional affiliations**

Soil Science Society of America, 2011 - present

Society for Range Management, 2009 - present

Ecological Society of America, 2013 - present

**Academic & community service**

* Volunteer, Point Blue Conservation Science STRAW Project, 8/2013.
* Student Council President, Lake Tahoe Community College, 9/2002-9/2003.
* Co-chair of Coats for Kids, South Lake Tahoe, California, 7/2002-4/2003.
* Region II Voting Delegate, California Community Colleges Student Association, 1/2002-1/2003.
* Student Council Commissioner of Political Affairs, Lake Tahoe Community College, 10/2001-9/2002.

**Selected Honors and Awards**

* Milton D. and Mary M. Miller Plant Science Award, 2013
* Soils and Biogeochemistry Graduate Fellowship, 2013
* UC Davis Competitive ‘Block Grant’ Fellowships, 2012