NATHAN FREEMAN SAYRE

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Academic Posts and Affiliations

Current:

Chair, Department of Geography, University of California-Berkeley, 7/2013-present

Professor, Department of Geography, University of California-Berkeley, 7/2016-present

Affiliated Social Scientist, USDA-Agricultural Research Service-Jornada Experimental Range, NSF-Jornada Basin Long-Term Ecological Research site, and USDA-Jornada Long-Term Agricultural Research site, Las Cruces, New Mexico, 2008-present

Affiliated Faculty, Energy and Resources Group, University of California-Berkeley

Affiliated Faculty, Graduate Program in Range, University of California-Berkeley

Affiliated Faculty, Berkeley Food Institute, University of California-Berkeley

Past:

- Associate Professor, Department of Geography, University of California-Berkeley, 7/2010-6/2016
- Assistant Professor, Department of Geography, University of California-Berkeley, 7/2004-6/2010
- Post-doctoral Research Associate, USDA-Agricultural Research Service-Jornada Experimental Range, Las Cruces, New Mexico, 12/2000-12/2003. *Mentor:* Dr. Kris Havstad, Supervisory Scientist

Visiting Scholar, Arizona State Museum, 1999-2000

Visiting Professor, Deep Springs College, May-June 1999

Education

Ph.D., Anthropology, University of Chicago, December 1999

Dissertation committee: Jean Comaroff (Chair), Andrew Apter, Alan Kolata, Moishe Postone, Elizabeth Povinelli, and Thomas Sheridan (University of Arizona)

M.A., Anthropology, University of Chicago, December 1995

B.A. (Summa cum laude), Yale University, Major in Philosophy, May 1992

Deep Springs College, 1987-89

Peer-reviewed Publications

- Sayre, Nathan F. Forthcoming. Race, Nature, Nation and Property in the Origins of Range Science. In Rebecca Lave, Christine Biermann, and Stuart Lane, eds. *The Handbook of Critical Physical Geography.* Palgrave.
- M. H. Nichols, C. Magiri, and N. F. Sayre. 2017. The Geomorphic legacy of water and sediment control structures in a semiarid rangeland watershed. *Earth Surface Processes and Landforms*. DOI: 10.1002/esp.4287.
- Sayre, Nathan F., Diana K. Davis, Brandon Bestelmeyer, and Jeb C. Williamson. 2017. Rangelands: Where Anthromes Meet Their Limits. *Land* 6, 31; doi:10.3390/land6020031.
- Sayre, Nathan F. 2017. The Politics of Scale: A History of Rangeland Science. Chicago and London: University of Chicago Press.
- Lynn Huntsinger and **Nathan F. Sayre.** 2017. Landscape Stewardship for Rangelands. In Claudia Bieling and Tobias Plieninger, eds. *The Science and Practice of Landscape Stewardship*. Cambridge: Cambridge University Press, pp. 284-305.
- Sayre, Nathan F. 2017. Scarcity. In Douglas Richardson, Noel Castree, Michael F. Goodchild, Audrey L. Kobayashi, Weidong Liu and Richard Marston, eds. *The International Encyclopedia of Geography*. John Wiley and Sons. DOI: 10.1002/9781118786352.wbieg0725.
- Sayre, Nathan F. 2015. Scales and Polities. In Tom Perreault, Gavin Bridge and James McCarthy, eds. *The Routledge Handbook of Political Ecology*, pp. 504-515. London and New York: Routledge.
- Sayre, Nathan F. 2015. The Coyote-Proof Pasture Experiment: How fences replaced predators and labor on US rangelands. *Progress in Physical Geography* 39: 576-593. DOI: 10.1177/0309133314567582.
- Brandon T. Bestelmeyer, Gregory S. Okin, Michael C. Duniway, Steven R. Archer, **Nathan F. Sayre**, Jebediah C. Williamson and Jeffrey E. Herrick. 2015. Desertification, land use, and the transformation of global drylands. *Frontiers in Ecology and the Environment* 13: 28-36.
- Thomas E. Sheridan and **Nathan F. Sayre**. 2014. A Brief history of people and policy in the West. In Susan Charnley, Thomas E. Sheridan, and Gary P. Nabhan, eds. *Stitching the West Back Together: Conservation of Working Landscapes*. University of Chicago Press, pp. 3-11.
- Susan Charnley, Thomas E. Sheridan, and Nathan F. Sayre. 2014. Status and trends of Western working landscapes. In Susan Charnley, Thomas E. Sheridan, and Gary P. Nabhan, eds. *Stitching the West Back Together: Conservation of Working Landscapes*. University of Chicago Press, pp. 13-32.
- Thomas E. Sheridan, **Nathan F. Sayre**, and David Seibert. 2014. Beyond "stakeholders" and the zero-sum game: Toward community-based collaborative conservation in the American West. In Susan Charnley, Thomas E. Sheridan, and Gary P. Nabhan, eds. *Stitching the West Back Together: Conservation of Working Landscapes*. University of Chicago Press, pp. 53-75.
- Sayre, Nathan F., and Adam Romero. 2015. Carrying capacities paradigm. In Jean-Frederic Morin and Amandine Orsini, eds. *Essential Concepts of Global Environmental Governance*, pp. 21-24. Abingdon: Routledge/Earthscan.
- Huntsinger, Lynn, **Nathan F. Sayre**, and Luke Macaulay. 2014. Ranchers, land tenure, and grass-roots governance: maintaining pastoralist use of rangelands in the U.S. in three different settings. In Pedro M. Herrera, Jonathan Davies and Pablo Manzano Baena, eds. *The*

Governance of Rangelands: Collective Action for Sustainable Pastoralism. London: Routledge, pp. 62-93.

- Lave, Rebecca, Matthew W. Wilson, Elizabeth S. Barron, Christine Biermann, Mark A. Carey, Chris S. Duvall, Leigh Johnson, K. Maria Lane, Nathan McClintock, Darla Munroe, Rachel Pain, James Proctor, Bruce L. Rhoads, Morgan M. Robertson, Jairus Rossi, Nathan F. Sayre, Gregory Simon, Marc Tadaki, and Christopher Van Dyke. 2013. Intervention: Critical physical geography. *The Canadian Geographer* 58: 1-10. DOI: 10.1111/cag.12061.
- Knapp, Corrine Noel, James Cochran, F. S. Chapin III, Gary Kofinas, and Nathan F. Sayre. 2013. Putting local knowledge and context to work for Gunnison Sage-grouse conservation. *Human-Wildlife Interactions* 7: 195-213.
- **Sayre, Nathan F.**, Ryan J. McAllister, Brandon T. Bestelmeyer, Mark Moritz, and Matthew D. Turner. 2013. Earth stewardship of rangelands: coping with ecological, economic, and political marginality. *Frontiers in Ecology and the Environment* 11(7): 348-354.
- Booker, Kayje, Lynn Huntsinger, James Bartolome, **Nathan F. Sayre**, and Bill Stewart. 2013. What can ecological science tell us about opportunities for carbon sequestration on rangelands? *Global Environmental Change* 23: 240-251. DOI: 10.1016/j.gloenvcha.2012.10.001.
- Sayre, Nathan F., Eric Biber, and Greta Marchesi. 2013. Social and legal effects on monitoring and adaptive management: a case study of National Forest grazing allotments, 1927-2007. *Society and Natural Resources* 26: 86-94. DOI: 10.1080/08941920.2012.694579.
- Sayre, Nathan F., Liz Carlisle, Gareth Fisher, Lynn Huntsinger, and Annie Shattuck. 2012. The Role of rangelands in diversified farming systems: innovations, obstacles, and opportunities in the USA. *Ecology and Society* 17(4): 43. http://dx.doi.org/10.5751/ES-04790-170443.
- Huntsinger, Lynn, Nathan F. Sayre, and J. D. Wolfhorst. 2012. Birds, beasts and bovines: Three cases of pastoralism and wildlife in the USA. *Pastoralism: Research, Policy and Practice* 2:12. DOI: 10.1186/2041-7136-2-12. URL: http://www.pastoralismjournal.com/content/2/1/12.
- **Sayre, Nathan F.,** William deBuys, Brandon Bestelmeyer, and Kris Havstad. 2012. 'The Range problem' after a century of rangeland science: New research themes for altered landscapes. *Rangeland Ecology and Management* 65: 545-552.
- Sayre, Nathan F. 2012. Carrying Capacity. In Robin Kundis Craig, Bruce Pardy, John Copeland Nagle, Oswald Schmitz, & William Smith (Eds.), *The Encyclopedia of Sustainability*, Vol. 5: *Ecosystem Management and Sustainability*, pp. 54-58. Great Barrington, MA: Berkshire Publishing.
- Sayre, Nathan F. 2012. The Politics of the Anthropogenic. *Annual Review of Anthropology* 41: 57-70. DOI: 10.1146/annurev-anthro-092611-145846.
- Rissman, Adena, and Nathan F. Sayre. 2012. Conservation outcomes and social relations: a comparative study of private ranchland conservation easements. *Society and Natural Resources* 25: 523-538. DOI: 10.1080/08941920.2011.580419
- Briske, David, Nathan F. Sayre, Lynn Huntsinger, Maria Fernandez-Gimenez, Bob Budd, and Justin Derner. 2011. Origin, persistence, and resolution of the rotational grazing debate: Integrating human dimensions into rangeland research. Rangeland Ecology and Management 64: 325-334.
- Sayre, Nathan F. 2011. A History of Land Use and Natural Resources in the Middle San Pedro Valley, Arizona. *Journal of the Southwest* 53: 87-137.

- Sayre, Nathan F. 2011. Commentary: scale, rent, and symbolic capital: political economy and emerging rural landscapes. *GeoJournal* 76: 437-439.
- Sayre, Nathan F. 2010. Entry for "Carrying Capacity." In Barney Warf, ed. Encyclopedia of Geography. Sage Publications.
- Sayre, Nathan F. 2010. Climate Change, Scale, and Devaluation: The Challenge of our Built Environment. *Journal of Energy, Climate, and Environment* 1: 83-94.
- Sayre, Nathan F. 2010. Climax and "Original Capacity": The Science and Aesthetics of Ecological Restoration in the Southwestern USA. *Ecological Restoration* 28: 23-31.
- Sayre, Nathan F., and Richard L. Knight. 2010. Potential effects of United States-Mexico border hardening on ecological and human communities in the Malpai Borderlands. *Conservation Biology* 24: 345-348.
- Sayre, Nathan F. 2009. Land, labor, livestock and (Neo)Liberalism: Understanding the Geographies of Pastoralism and Ranching. *Geoforum* 40: 705-706.
- Sayre, Nathan F., and Alan Di Vittorio. 2009. Scale. Pp. 19-28 in Robert Kitchin and Nigel Thrift, eds. *The International Encyclopedia of Human Geography*, vol. 1. Oxford: Elsevier.
- Sayre, Nathan F. 2009. Bad Abstractions: Response to Sullivan. *Conservation Biology* 23(4): 1050-1052.
- Sayre, Nathan F. 2009. Scale. Pp. 95-108 in Noel Castree, David Demeritt, Bruce Rhoads, and Diana Liverman, eds. *A Companion to Environmental Geography*. Chichester, UK: Wiley-Blackwell.
- Sayre, Nathan F. 2008. Assessing the Effects of the *Grundrisse* in Anglophone Geography and Anthropology. *Antipode* 40(5): 898-920.
- Sayre, Nathan F. 2008. The Genesis, History, and Limits of Carrying Capacity. Annals of the Association of American Geographers 98(1): 120-134.
- Sayre, Nathan F. 2007. Entries for "Carrying Capacity," "US Fish and Wildlife Service," "Endangered Species Act (1973)," "Natural Resource Conservation Service," "Frederic Clements," "Grazing," and "Ranchers." *In* Paul Robbins, ed. *Encyclopedia of Environment and Society.* Sage Publications.
- Sayre, Nathan F. 2007. The Ranching and Mining Period. *Desert Plants* 23(2): 12-17 (special issue on the Buenos Aires National Wildlife Refuge, edited by J. Bezy, C.F. Hutchinson, and C.J. Bahre).
- Sayre, Nathan F. 2007. A History of Working Landscapes: The Altar Valley, Arizona, USA. Rangelands (June): 41-45.
- Huntsinger, Lynn, and Nathan F. Sayre. 2007. Introduction: The Working Landscapes Special Issue. *Rangelands* (June): 3-4.
- Sayre, Nathan F. 2007. The Western Range: A Leaking Lifeboat for Conservation in the New West. *In* Laura Pritchett, Richard L. Knight, and Jeff Lee, eds. *Home Land: Ranching and a West That Works*. Denver: Johnson Books.
- Sayre, Nathan F. 2006. Scott Prudham's *Knock on Wood:* Nature as Commodity in Douglas-Fir Country. *Antipode* 38(5): 1073-1076.
- Sayre, Nathan F. 2005. Working Wilderness: the Malpai Borderlands Group and the Future of the Western Range. Tucson: Rio Nuevo Press.

- Sayre, Nathan F. 2005. Rangeland degradation and restoration in the "desert seas": social and economic drivers of ecological change between the sky islands. Pp. 349-352 in Gerald J. Gotfried, Brooke S. Gebow, Lane G. Eskew and Carleton B. Edminster, compilers. *Connecting mountain islands and desert seas: biodiversity and management of the Madrean Archipelago II.* 2004 May 11-15; Tucson, AZ. Proceedings RMRS-P-36. Fort Collins, CO: US Department of Agriculture, Forest Service, Rocky Mountain Research Station. 631 p.
- Sayre, Nathan F. 2005. Interacting effects of landownership, land use, and endangered species on conservation of Southwestern U.S. rangelands. *Conservation Biology* 19(3): 783-792
- Sayre, Nathan F. 2005. Ecological and geographical scale: parallels and potential for integration. *Progress in Human Geography* 29(3): 276-290.
- Sayre, Nathan F. 2004. Viewpoint: The need for qualitative research to understand ranch management. *Journal of Range Management* 57: 668-674.
- Sayre, Nathan F. 2003. Recognizing History in Range Ecology: 100 Years of Science and Management on the Santa Rita Experimental Range. Pp. 1-15 in Mitchel P. McClaran, Peter F. Ffolliott and Carleton B. Edminster, tech. coords. *Santa Rita Experimental Range: 100 Years* (1903-2003) of Accomplishments and Contributions; conference proceedings; 2003 October 30-November 1; Tucson, AZ. Proc. RMRS-P-30. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- Sayre, Nathan F., and Maria Fernandez-Gimenez. 2003. The Genesis of Range Science, with Implications for Pastoral Development Policy. Pp. 1976-1985 in N. Allsopp, A.R. Palmer, S.J. Milton, K.P. Kirkman, G.I.H. Kerley, C.R. Hurt, and C.J. Brown, eds. *Proceedings of the VIIth International Rangeland Congress.* 26 July-1 August 2003, Durban, South Africa.
- Sayre, Nathan F. 2002. Ranching, Endangered Species, and Urbanization in the Southwest: Species of Capital. Tucson: University of Arizona Press.
- Curtin, Charles, **Nathan F. Sayre**, and Benjamin Lane. 2002. Transformations of the Chihuahua Borderlands: Grazing, Fragmentation, and Biodiversity Conservation in Desert Grasslands. *Environmental Science and Policy* 5: 55-68.
- Sayre, Nathan F. 2001. The New Ranch Handbook: A Guide to Restoring Western Rangelands. Santa Fe: The Quivira Coalition.
- Sayre, Nathan F. 1999. The Cattle Boom in Southern Arizona: Towards a Critical Political Ecology. *Journal of the Southwest* 41(2): 239-271.

Technical Reports and Other Publications (sole authored unless otherwise noted)

- Sayre, Nathan F., Ruth Kelty, Mark Simmons, Susan Clayton, Karim-Aly Kassam, S.T.A. Pickett, and F. Stuart Chapin III. 2013. Invitation to Earth Stewardship. *Frontiers in Ecology and the Environment* 11(7): 339.
- Have we always been diagonal? A response to Osofsky's "Is Climate Change 'International'?" *Opinio Juris* 16 April 2009. <u>http://opiniojuris.org/2009/04/16/have-we-always-been-diagonal-a-response-to-osofsky%E2%80%99s-%E2%80%9Cis-climate-change-%E2%80%98international%E2%80%99%E2%80%9D/</u>

The New Western Range. The Quivira Coalition Journal No. 30 (March 2007), pp. 12-17.

- Sustainable Ranching in the Western US. Invited white paper for "Saving the Wide Open Spaces," a conference convened in Tucson, Arizona, May 13-15, 2005.
- A History of Land Use and Natural Resources in the Cascabel-Redington Area of the San Pedro Valley. Lower San Pedro Watershed Assessment Project, Task 3. Contract report to the Redington Natural Resources Conservation District under Grant #00-109 of the Arizona Water Protection Fund. September 2004.
- Against Long Odds: A long-term plan for the Malpai Borderlands Group. Malpai Borderlands Group long-term planning project, task 2. Contract report, February 2004.
- Rangeland Health and Planned Grazing Field Guide (co-author, with Kirk Gadzia). Santa Fe: Earth Works Institute and Quivira Coalition, 2003.
- Ecosystem Management under Conditions of Scientific Uncertainty. Malpai Borderlands Group long-term planning project, task 1: Synthesis and assessment of the state-of-the-knowledge. Contract report, April 2003.
- The Urbanization of Ranching. In *Forging a West that Works: An Invitation to the Radical Center*. Santa Fe: Quivira Coalition, 2003.
- Rethinking Protected Areas: The Case of the Buenos Aires National Wildlife Refuge. In *The New Ranch at Work: Proceedings of a Conference*. Santa Fe: Quivira Coalition, 2003
- Framework for a Habitat Conservation Plan in the Altar Valley Watershed. Report prepared for the Altar Valley Conservation Alliance, under contract with the Sonoran Institute, Tucson, Arizona. June 2002.
- Background information for conserving open space and restoring the floodplain in the Altar Valley. Report prepared for the Altar Valley Conservation Alliance, under contract with the Sonoran Institute, Tucson, Arizona. June 2002.
- Sayre, Nathan F., Dan Robinett, George Ruyle, Mette Brogden, Harold Barnett and Walter Lane. Preserving Ranchlands in Pima County. Report of the Ranch Conservation Technical Advisory Team to the Sonoran Desert Conservation Plan. Tucson: Pima County Board of Supervisors, October 2000.
- Land use history of the Altar Valley. Task 3 of the Altar Valley Watershed Resource Assessment. Tucson: Altar Valley Conservation Alliance, April 2000. Funded by the Arizona Water Protection Fund, Grant No. 97-041 WPF.

Invited Keynotes, Seminars, Workshops, etc.

- Invited speaker, Spotlight Seminar series, Department of Forest and Rangeland Stewardship, Colorado State University, Fort Collins CO, March 29, 2018.
- Keynote speaker, 2017 Rangeland Fall Forum, University of Idaho Rangeland Center, Boise, October 5-6, 2017.
- Moderator, Carol Christ and David Neidorf in Conversation. Berkeley Art Museum/Pacific Film Archive Discussion Series, 10 June 2017.
- Invited speaker, Geography Graduate Group Colloquium, University of California-Davis, 31 May 2017.
- Invited participant, ISEECI History and Geography Working Group meeting, Sedgwick Natural Reserve, Santa Barbara CA, 24-26 March 2017.

- Invited speaker, Environments and Societies Colloquium, University of California-Davis, 2 March 2016.
- Keynote speaker, Malpai Borderlands Group Science Meeting, 5 January 2016.
- Invited panelist, An End to the Age of Entitlement: Reconsidering Land Ownership, Use and Community. Workshop hosted by the David Brower Center and RSF Social Finance, Berkeley CA, 7 November 2015.
- Invited speaker, 2015 Southwest Climate Summit: Bridging the Gap—from science to management actions in climate adaptation. Talk title: "When is Carrying Capacity? Problems of time in adapting to drought in Southwestern desert grasslands." Sacramento, CA, 2-3 November 2015.
- Invited participant, Coping with Historic Drought in California Rangelands: Developing Strategies, Tactics and Tools. Workshop convened by the USDA Southwest Climate Hub, Davis, California, September 29-30, 2015.
- Invited speaker, Practicing Political Ecology: A Left Coast Workshop, University of California, Berkeley, 7 May 2015.
- Invited speaker, California Rangeland Conservation Coalition Annual Summit, Sacramento CA, 3 February 2015. Talk title: "A History of Collaborative Conservation for Rangelands."
- Invited speaker, Berkeley Food Institute Food Exchange Series workshop, "Sustainable Livestock Innovations and Impacts." David Brower Center, Berkeley CA, 15 May 2014.
- Invited speaker, Grazing and Beef Speaker Series, Yale University School of Forestry and Environmental Studies. "The Political Ecology of Rangelands." 26 March 2014.
- Research Seminar: Integrating Social and Biophysical Epistemologies, Data and Methods. Berkeley Social Science Matrix, 2013-2014. (Organizer)
- Faculty Workshop: Transitions Towards Sustainable Food Systems. Berkeley Food Institute, 2013-2014. Olivier De Schutter, organizer.
- Keynote speaker, conference on Working for Conservation: Active Engagement in Forest and Woodland Sustainability, sponsored by UC-Berkeley College of Natural Resources. Talk title: "How much work does a working landscape take?" Sacramento CA, 10 October 2013.
- Invited participant, panel on "Food: nutrition, nutritionism, and the environment." J. E. Sawyer Seminar on *Speciesism and the Future of Humanity: Biology, Culture, and Sociopolitics*, funded by the Andrew W. Mellon Foundation. UC-Berkeley, 21 March 2013.
- Invited speaker, Colorado University Geography Department Colloquium. Boulder CO, 22 February 2013.
- UC Natural Reserve System Strategic Planning Workshop. National Center for Ecological Analysis and Synthesis, Santa Barbara CA, February 4-6, 2013.
- Invited participant, Earth Stewardship Workshop. Ecological Society of America. Washington DC, 18-19 June 2012. Steward Pickett and F. Stuart Chapin III, organizers.
- Invited speaker, UC-Davis College of Agriculture and Environmental Sciences. "Using scale for interdisciplinary synthesis and research." Solicited as part of planning for the creation of the new Department of Human Ecology, November 2011.
- Invited speaker, TomKat Ranch Field Day: The Climate Benefits of Sustainable Ranching. Sponsored by the California Climate and Agriculture Network. Pescadero, CA, 29 July 2011.

- Maps and Locals Workshop II, NSF-Long-Term Ecological Research Network. HJ Andrews Experimental Forest, Blue River, Oregon, June 5-8, 2011. (Co-organizer)
- Invited speaker, College of Natural Resources, Utah State University, Logan UT, 17 November 2010. Talk title: "The Western Range: A leaking lifeboat for conservation in the New West."
- Maps and Locals Workshop I, NSF-Long-Term Ecological Research Network. University of Alaska-Fairbanks, 7-11 October 2010. (Co-organizer)
- Invited speaker, Congress on Western Rangelands, Boise ID, 13 January 2010. Talk title: "The Western Range: A leaking lifeboat for conservation in the New West."
- Workshop on Community-based Conservation of Working Forests and Rangelands, Stanford University, July 2009. Thomas Sheridan, Susan Charnley and Gary Nabhan, organizers.
- Invited speaker, Journal of Energy, Climate, and the Environment Symposium 2009: Climate Policy for the Obama Administration. Washington and Lee University School of Law, 20 February 2009. Talk title: "Climate Change, Scale, and Devaluation: The Challenge of Our Built Environment."
- Invited Closing Speaker, 4th Summit of the California Rangelands Conservation Coalition, Chico CA, 8 January 2009.
- Invited speaker, Department of Forestry and Wildland Resources Colloquium, Humboldt State University, November 2008. Talk title: "Inducing Conservation: Land, leverage, and learning in mixed public-private US rangelands."
- Invited speaker, Environmental Fluid Mechanics and Hydrology Program Colloquium, Department of Civil and Environmental Engineering, Stanford University, Palo Alto, CA, 2 June 2008.
- Keynote speaker. 2008 Annual Conference of the California Native Grasslands Association. Santa Rosa, CA, 2 May 2008.
- Working Group Meeting on Design Challenges and Solutions for Establishing a Network of Socio-Ecological Research Sites, NSF-LTER Network, San Juan, Puerto Rico, 16-18 December 2008.
- Invited speaker, Environmental Politics Colloquium Series, Politics Department, Whitman College, Walla Walla, WA, 25 October 2007.
- Invited speaker, Colloquium Series, Department of Environmental Studies, UC Santa Cruz, Santa Cruz, CA, 8 October 2007.
- Working Group on Science and Natural Resource Regulation, University of California-Davis School of Law. Davis, CA, 27-28 October 2006. Holly Doremus, organizer.
- Saving the Wide Open Spaces Workshop, Tucson AZ, May 2005. Tom Sheridan and Susan Charnley, organizers.

Conference Presentations

"The Exception is Now the Rule: Southwestern Semiarid Grasslands in the History of Rangeland Ecology." Invited speaker, 14th Annual RISE Symposium (Research Insights in Semiarid Ecosystems), University of Arizona, Tucson, AZ, 21 October 2017.

- "Ensuring Sustainable Consumption and Production Patterns." Invited speaker, Ignite session on Sustainable Development Goals: Can Ecologists Help Them Transform our World? Ecological Society of America Annual Meeting, Portland OR, 7 August 2017.
- "Replacing the Range: Colonial Legacies in Rangeland Ecology and Management." Invited presenter in session on Ecologies of the Colonial Present: Legacies in environmental policy and practice. American Association of Geographers Annual Meeting, Boston MA, 9 April 2017.
- Invited discussant, panel on "Sustainable Territories II? Local and Transnational Territorializations for Environmental Governance." American Association of Geographers Annual Meeting, Boston MA, 7 April 2017.
- "How Range Science Became Clementsian." Invited presenter in sessions on Critical Physical Geography, American Association of Geographers Annual Meeting, San Francisco CA, 29 March 2016.
- "The Value of Capitalist Natures I: Foundations and Debates." Invited panelist, Association of American Geographers Annual Meeting, Chicago IL, 22 April 2015.
- "A Scientific Knowledge Perspective." Panel on "Confronting the Management-Science Knowledge Gap to Support Natural Resource Management." Society for Range Management Annual Meeting, Sacramento CA, 5 February 2015.
- "CALMing the Rangeland Conflict: the Malpai Borderlands Group." Panel on "Collaborative Adaptive Landscape Management (CALM) in Rangelands: Are there general principles?" Society for Range Management Annual Meeting, Sacramento CA, 2 February 2015.
- Invited panelist, "Sustainable Livestock Innovations and Impacts." Berkeley Food Institute's Food Exchange Series. Berkeley CA, 15 May 2014.
- "The Coyote-Proof Pasture Experiment: How fences replaced predators, fire, and labor on US rangelands." Energy and Resources Group Colloquium, University of California-Berkeley, 6 November 2013.
- "Follies of fencing and fortification: sustainability and spatial control in the US-Mexico borderlands." Panel on Nature, Violence, and Property, Annual Meeting of the Association of American Geographers. Los Angeles CA, 19 April 2013.
- "Reflections on shrub control and grass restoration in the Southwest." Malpai Borderlands Group Annual Science Meeting, Douglas AZ, 8 January 2013.
- Invited respondent, "Cross-disciplinary approaches to 'borders and crossings" inno-vent session. Annual Meeting of the American Anthropological Association, San Francisco CA, 16 November 2012.
- "The Malpai Contingency: How Private Land Conservation Easements Can Improve Public Land Management." North American Congress for Conservation Biology, Oakland CA, 16 July 2012.
- "Historical Roots of the Rangeland Conflict: Overcoming Structural and Intellectual Anachronisms." 65th Annual Meeting of the Society for Range Management, Spokane WA, 31 January 2012.
- "Earth Stewardship and the Built Environment: Climate Change, Scale, and Devaluation." 96th Annual Meeting of the Ecological Society of America, Austin TX, 9 August 2011.

- "Grassland, Shrubland, and Savanna Stewardship: Where Do We Go from Here?" Second author, with Brandon Bestelmeyer. 96th Annual Meeting of the Ecological Society of America, Austin TX, 9 August 2011.
- Organizer, Special Session on "Scale, Heterogeneity, and Resilience: Grounding Abstract Concepts in Rangelands." 96th Annual Meeting of the Ecological Society of America, 8 August 2011.
- Organizer and discussant. Using Local Knowledge to Understand Land Use/Land Cover Change at Long Term Ecological Research (LTER) Sites. Annual Meeting of the Association of American Geographers, Seattle WA, 15 April 2011.
- Invited member of panel discussion. Author Meets Critics: Robert Wilson's *Seeking Refuge: Birds and Landscapes of the Pacific Flyway*. Annual Meeting of the Association of American Geographers, Seattle WA, 14 April 2011.
- Invited member of panel discussion. Human Environment Interactions in the Borderlands. Annual Meeting of the Association of American Geographers, Seattle WA, 13 April 2011.
- "From Contracts to Custom: Reconstituting a Commons through Collaborative Landscape-scale Management." North America Regional Meeting of the International Association for the Study of the Commons, Tempe AZ, 30 September 2010.
- Invited discussant, Berkeley Institute of the Environment Diversified Farming Systems Working Group. Keynote by Sara Scherr, "Feeding 9 Billion with the Challenges of Climate Change: Towards Diversified Ecoagriculture Landscapes." 5 May 2010.
- "Cross-site comparison in Long Term Social-Ecological Research: Identifying scales and processes through maps and local knowledge." Annual Meeting of the Association of American Geographers, Washington DC, 14 April 2010.
- "From Contracts to Custom: Reconstituting a Commons through Collaborative Landscape-scale Management?" Symposium on Pastoralists and Property Rights, Society for Range Management Annual Meeting, Denver CO, 8 February 2010.
- "Inducing Conservation, or Swimming Downstream: Assessing the effects and effectiveness of conservation easements in the Malpai Borderlands." Malpai Borderlands Group Annual Science Meeting, Douglas, AZ, 5 January 2010.
- "Integrating Local Knowledge into the Study of Southwestern Social-Ecological Systems." Invited speaker, 18th Jornada Symposium, USDA-ARS Jornada Experimental Range, Las Cruces, New Mexico, 16 July 2009.
- "Natural Capital? Resilience, dialectics, and emergent properties." Paper presented at Annual Meeting of the Association of American Geographers, Las Vegas, Nevada, 22 March 2009.
- Invited discussant for panel: "Geographies of the gift: obligation, gratitude, and exchange." Annual Meeting of the Association of American Geographers, Las Vegas, Nevada, 23 March 2009.
- "Respecting the roles of science and management in the rangeland profession." Invited speaker for panel on Development of Comprehensive Grazing Policy Guidelines: A Case for Adaptive Collaboration within the Rangeland Profession. Annual Meeting of the Society for Range Management, Albuquerque NM, 8-12 February 2009

- Organizer, panel on "Pastoralism, Ranching and Capitalism, or, What's New About Neoliberalism?" Annual Meeting of the Association of American Geographers, San Francisco, CA, 17-21 April 2007.
- "The Western Range Goes Global: Post-World War II International Pastoral Development Projects in the "Third World." Paper presented to the Annual Meeting of the Association of American Geographers, San Francisco, CA, 17-21 April 2007.
- Panelist, "Geographies of Marx's Grundrisse." Annual Meeting of the Association of American Geographers, San Francisco, CA, 17-21 April 2007.
- Discussant, panel on "Emerging Conservation Landscapes I: Agricultural Lands in the American West." Annual Meeting of the Association of American Geographers, San Francisco, CA, 17-21 April 2007.
- "Problems of history and scale in endangered species conservation: case studies from southern Arizona." Paper delivered to the Annual Meeting of the American Society for Environmental History, Baton Rouge, LA, 28 February-3 March 2007.
- Invited discussant, panel on "Producing Space for Conservation in Tanzania," 49th Annual Meeting of the African Studies Association, San Francisco, CA, 16-19 November 2006.
- "Natural Capital? Critical Geography and the Quest for Social-Ecological Resilience." Invited paper for Social Dimensions of Global Environmental Change Speaker Series, Dickey Center for International Understanding, Dartmouth College, 6 November 2006.
- "Original Capacity': A Social History of Restoration Efforts in the Southwestern USA." Talk presented to "Restoring or Renaturing?: The Presence of the Past in Ecological Restoration. A Transatlantic Workshop", Institute of Environmental Studies, University of Zurich, Switzerland, 10-11 July 2006.
- "Conservation Across the US-Mexico Border: Historical-Geographical Insights." Talk presented to the 20th Annual Meeting of the Society for Conservation Biology, San Jose, CA, 24-28 June 2006.
- "Rescaling the Range: Interacting Ecological and Economic Processes in Land-Use Conversion." Energy and Resources Group Colloquium Series, University of California, Berkeley, 5 April 2006.
- "Rangeland Conservation in the US: either green or market, but not both." Paper presented to the 102nd Annual Meeting of the Association of American Geographers, Chicago, 7-11 March 2006.
- "Working Wilderness: The History of the Malpai Borderlands Group and the Future of the Western Range." Invited presentation, Bill Lane Center for the Study of the North American West, Stanford University, 25 October 2005.
- "Cooperation Replacing Warfare: The Story of the Malpai Borderlands Group." Invited presentation, Sustainable Development Seminar, Johnson Graduate School of Management, Cornell University, Ithaca NY, 15 April 2005.
- Invited panelist, "Henri Lefebvre: politics, state, space." Association of American Geographers Annual Meeting, Denver CO, 5-9 April 2005.
- "Prospects and Tools for Sustainable Ranching in the West." Invited keynote speech, Rangelands West Partnership Conference, Tucson AZ, 16-17 March 2005.

- "Protecting Endangered Species at Large Scales: Problems of Presumption, Risk, and Trust." Invited paper presented to the Malpai Borderlands Group Science Conference, Douglas AZ, 3-4 January 2005.
- "Against Long Odds: A multidisciplinary long-term planning project with the Malpai Borderlands Group." Paper presented to the 14th Annual Jornada Symposium, Jornada Experimental Range, Las Cruces NM, 15 July 2004.
- "Rangeland degradation and restoration in 'the desert seas': social and economic drivers of ecological change between the sky islands." Paper presented to Biodiversity and Management of the Madrean Archipelago II: Connecting Mountain Islands and Desert Seas, 11-15 May, 2004, Tucson, Arizona.
- "Surrogates for mobility: rediscovering pastoralism in the American West." Paper presented to the 100th Annual Meeting of the Association of American Geographers, Philadelphia, March 2004.
- "Recognizing History in Range Ecology: 100 Years of Science and Management on the Santa Rita Experimental Range." Paper delivered to Santa Rita Experimental Range: 100 Years (1903-2003) of Accomplishments and Contributions, October 30-November 1, 2003, Tucson, Arizona.
- "The Altar Valley Arroyo: history, impacts and restoration." Presentation to the Arizona Hydrological Society's 16th Annual Symposium, 17-20 September 2003, Mesa, Arizona.
- "The Genesis of Range Science, with Implications for Pastoral Development Policy" (lead author, with Maria Fernandez-Gimenez). Paper delivered to the VIIth International Rangeland Congress, Durban, South Africa, 26 July-1 August 2003.
- "Burning, grazing, and endangered species: Forest politics in the U.S./Mexico borderlands." Paper delivered to the 99th Annual Meeting of the Association of American Geographers, New Orleans, Louisiana, March 2003.
- Organizer, Moderator, and Panelist. Wildlife on a Fragmenting Range: Can ranchers and scientists conserve habitat in the "New West"? 56th Annual Meeting of the Society for Range Management, Casper, Wyoming, February 2003.
- "Managing Grazing, Fire, and Endangered Species on Private, State, and Federal Rangelands: A Comparison of Three Southwestern Cases." Paper delivered to the 56th Annual Meeting of the Society for Range Management, Casper, Wyoming, February 2003.
- "Ranchers, Restoration, and Leopold's Land Ethic in the Altar Valley Southwest of Tucson." Paper delivered to the joint meeting of the Ecological Society of America and the Society for Ecological Restoration, Tucson, Arizona, 4-9 August 2002.
- "Scale, Capital, and the Grazing Debate: A Case from the American Southwest." Paper delivered to the 98th Annual Meeting of the Association of American Geographers, Los Angeles, California, 19-23 March 2002.
- "Rethinking Protected Areas: The Case of the Buenos Aires National Wildlife Refuge." Paper delivered to the Quivira Coalition's First Annual Conference: The New Ranch at Work, Albuquerque, New Mexico, 18-19 January 2002.
- "Preserving Working Ranches and Desert Grasslands: Theory and Practice." Paper delivered to Hot Topics/Cool Solutions 2001: The Sustaining Desert: Building Livable Futures. Tucson, Arizona, 10-12 September 2001.

- "The Importance and Some Challenges of Participatory Research." Paper delivered to the Society for Range Management, Arizona Section Winter Meeting, Tempe, Arizona, 12-13 January 2001.
- "The Free Market, Pristine Nature, and Other Myths of the New West." Paper delivered to American Anthropological Association Annual Meeting, San Francisco, 15-19 November 2000.
- "Ranching in the Political Ecology of Southern Arizona." Paper delivered to Society for Applied Anthropology Annual Meeting, Tucson, 20-25 April 1999.
- "A Place Outside of Time': The Construction of Atemporality on a National Wildlife Refuge." Paper delivered to American Anthropological Association Annual Meeting, Chicago, 17-21 November 1999.
- "Producing a State of Nature: The Buenos Aires National Wildlife Refuge and Henri Lefebvre's State Mode of Production." Paper delivered to 14th World Conference of Sociology, Montreal, 26 July-1 August 1998.
- Organizer and Moderator, panel on Non-Traditional Uses of Grasslands, Conference on "The Future of Arid Grasslands: Identifying Issues, Seeking Solutions," Tucson, 9-13 October 1996.

Book Reviews

- Jack Stauder. The Blue and the Green: A Cultural Ecological History of an Arizona Ranching Community. University of Nevada Press, 2016. Pacific Historical Review 87 (2018): 219-220.
- Laura Alice Watt. The Paradox of Preservation: Wilderness and Working Landscapes at Point Reyes National Seashore. University of California Press, 2017. Boom: California 24 August 2017. https://boomcalifornia.com/2017/08/24/illusions-and-perversions-in-californias-historyof-preservation/
- George Colpitts. *Pemmican Empire: Food, Trade, and the Last Bison Hunts in the North American Plains.* Cambridge University Press, 2015. *Agricultural History* 90(2) (Spring 2016): 267-268.
- Benny J. Andres, Jr. Power and Control in the Imperial Valley. Texas A&M University Press, 2015. Journal of American History forthcoming.
- Robert J. Mayhew. *Malthus: The Life and Legacies of an Untimely Prophet.* Belknap Press of Harvard University Press, 2014. *H-Net Reviews*, April 2015. http://www.h-net.org/reviews/showpdf.php?id=43912.
- Andrew Needham. Power Lines: Phoenix and the Making of the Modern Southwest. Princeton University Press, 2014. Pacific Standard Magazine, 31 December 2014. http://www.psmag.com/books-and-culture/shelf-help-power-lines-phoenix-makingmodern-southwest-95441
- Andrew Sluyter. Black Ranching Frontiers: African Cattle Herders of the Atlantic, 1500-1900. Yale University Press, 2012. Pastoralism: Research, Policy and Practice, 4:8 (2014)(3 pp.).
- Peter S. Alagona. After the Grizzly: Endangered Species and the Politics of Place in California. University of California Press, 2013. AAG Review of Books 2(3) (2014): 86-88.
- Eric Perramond. Political Ecologies of Cattle Ranching in Northern Mexico: Private Revolutions. University of Arizona Press, 2010. Journal of Historical Geography 37 (2011): 513-514.

- Roger Keil and Rianne Mahon, eds. Leviathan Undone? Towards a Political Economy of Scale. University of British Columbia Press, 2009. Journal of Regional Science 51 (2011): 647-649.
- Kanishka Goonewardena, Stefan Kipfer, Richard Milgrom and Christian Schmid, eds. Space, Difference, Everyday Life: Reading Henri Lefebvre. Routledge, 2008. International Journal of Urban and Regional Research 33(4) (2009): 1088-1090.
- Wallace S. Broecker and Robert Kunzig. Fixing Climate: What Past Climate Changes Reveal About the Current Threat—and How to Counter It. Hill and Wang, 2008. Rangelands 30(6): 48.
- Marcus Hall. Earth Repair: A Transatlantic History of Environmental Restoration. University of Virginia Press, 2005. Journal of Historical Geography 33 (2007): 711-713..
- "The End of the Grazing Debate." Review of: George Wuerthner and Mollie Matteson, eds. Welfare Ranching: The Subsidized Destruction of the American West. Covelo: Island Press, 2002; and Richard L. Knight, Wendell C. Gilgert and Ed Marston, eds. Ranching West of the 100th Meridian: Culture, Ecology, and Economics. Covelo: Island Press, 2002. Conservation Biology 17(4) (August 2003): 1186-1188.
- J. Mallea-Olaetxe. Speaking Through the Aspens: Basque Tree Carvings in California and Nevada. Reno: University of Nevada Press, 2000. Geographical Review 91(3) (July 2001): 604-606.
- David Harvey. *Spaces of Hope*. Berkeley: University of California Press, 2000. American Ethnologist 28(3) (August 2001): 694-696.
- Roy Ellen and Katsuyoshi Fukui, eds. Redefining Nature: Ecology, Culture and Domestication. Oxford: Berg, 1996. American Ethnologist 25(3) (August 1998): 515-16.

Fellowships, Grants, and Academic Awards

- Co-PI, CNH-S: Interaction Between Human Perspectives and Natural System Dynamics in the Restoration of Riparian Forests in the Southwestern U.S. Principal Investigator Anna Sher (Denver University). NSF Award 1617463. \$332,839, 2016-2019.
- Investigator, LTER: Long-Term Research at the Jornada Basin (LTER-VI). National Science Foundation award number 1235828. \$5,880,000, 2012-2018.
- UC-Mexus Small Grant, 2011. Collaborative socio-ecological research in the US-Mexico Borderlands. \$1500.
- NSF-Long-Term Ecological Research Network Social Science Supplement award for "Maps and Locals Project," through Jornada Basin LTER, 2010. \$17,000.
- NSF-Long-Term Ecological Research Network Social Science Supplement award for "Maps and Locals Project," through Jornada Basin LTER, 2009. \$15,000.
- Fellow, Mellon Faculty Institute on Undergraduate Research, University of California, Berkeley, 2006-07.
- Junior Faculty Research Grants, Committee on Research, University of California, Berkeley, 2004-05 and 2006-07.
- Faculty Research Grant, Committee on Research, University of California, Berkeley, 2005-06.
- Post-doctoral Research Fellowship, USDA-Agricultural Research Service-Jornada Experimental Range, December 2000-December 2003.

Weatherhead Fellowship, School of American Research, Santa Fe NM, 1998-99.

National Science Foundation Graduate Research Fellowship, 1995-98.

University of Chicago Century Fellowship, 1994-95.

Summa Cum Laude, Phi Beta Kappa, and Honors in Philosophy, Yale University, 1992.

Teaching Experience

Undergraduate Courses:

- Geography 10: World Regions, Peoples, and States. Fall 2005, Fall 2006, Fall 2007, Fall 2008, Spring 2010, Fall 2012. Average enrollment: 245.
- Geography 130: Food and the Environment. Spring 2010, Spring 2011, Fall 2011, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018. Average enrollment: 220.
- Geography 130: Natural Resources and Population. Spring 2005, Spring 2006, Spring 2008. Average enrollment: 150.
- Letters and Sciences 70B: Global Warming (developed and taught with Professor John Chiang). Spring 2007, Spring 2009, Spring 2011, Spring 2014. Average enrollment: 100.
- Geography 175: Research Seminar: Topics in the History of Natural Resources Management. Spring 2006 (focus on range science), Spring 2008 (focus on carrying capacity). Average enrollment: 15.

Graduate Courses:

- Geography 200A: Contemporary Geographic Thought. Fall 2015, Fall 2016, Fall 2017. Enrollment: 6-9.
- Geography 203: Nature and Culture: Social Theory, Social Practice, and the Environment. Spring 2005, Fall 2005, Fall 2006, Fall 2007, Fall 2008, Spring 2011, Fall 2011, Fall 2016. Enrollment: 8-16.
- Geography 220: Capital, Value, and Scale. Spring 2007, Spring 2009, Spring 2013. Enrollment: 6-20.

PhD Advisees (year completed, department if not Geography) (*Chair or Co-Chair):

Andrew Friedman (2014)	Zac Henson (ESPM, 2013)
*Jenny Baca (2015)	Margot Higgins (ESPM, 2015)
Sandy Brown (2012)	Tracy Hruska (ESPM)
Joseph Bryan (2007)	Julie Klinger (2015)
*Liz Carlisle (2015)	Sarah Knuth (2014)
Clint Carroll (ESPM, 2011)	Rebecca Lave (2008)
Shannon Cram (2015)	*Jeff Martin
Lucy Diekmann (ESPM, 2011)	*Nathan McClintock (2011)
Jennie Durant (ESPM)	Susan Kay McIlroy (ESPM, 2008)
Michael Dwyer (ERG, 2011)	Maywa Montenegro de Wit (ESPM)
Gabe Eckhouse	MacKenzie Moore (History, 2012)
Benjamin Gardner (2007)	Lusi Morhayim (Architecture, 2012)

N.F. Sayre

Gustavo Oliveira (2017) Robert Parks (ESPM) Carol Pranka (ESPM, 2014) Adena Rissman (ESPM, 2008) Paul Roge (ESPM, 2013) *Adam Romero (2015) *Annie Shattuck Anne Short (ERG, 2010) Morgan Williams

Qualifying Exam Committees (not including PhD advisees listed above) (*Chair)

*Javier Arbona (2008) Josh Arnold (ESPM, 2017) Jiat-Hwee Chang (Architecture, 2006) Stephanie Kim (CRP, 2007) Jessica Lage (2008) Peter Rawitscher (Anthropology, 2005) Kimberly Rodrigues (ESPM, 2005)

John Stehlin (2011) Jason Strange (2005) *Jessica Taal (2008) Karin Tuxen Bettman (ESPM, 2005) *Alberto Velazquez (2012) *Mary Whelan (2009) Annah Zhu (ESPM, 2015)

Post-Doctoral/Visiting Mentees

Mark Carey, Ciriacy-Wantrup Fellow, 2005-2007 Mike Simpson, SSHRC Fellow, 2016

Undergraduate Advisee Prizes and Awards:

- Agata Surma, Haas Scholarship, 2006. Support for summer research and one-year capstone thesis project.
- Joshua Belton, Haas Scholarship, 2006. Support for summer research and one-year capstone thesis project.
- Eyal Mazor, Summer Undergraduate Research Fellowship, 2008. Research in Zambia and London.
- Jenny Cooper, Summer Undergraduate Research Fellowship, 2008. Research in Seattle.
- Jeffrey Martin, Judith Lee Stronach Prize for outstanding undergraduate research, 2008. \$20,000 for one-year research support. (One of five awarded campus wide.)
- Jenny Cooper, John Gardner Public Service Fellowship, 2009. \$25,000 for one-year public service internship. (One of three awarded campus wide.)
- Eyal Matalon, John Gardner Public Service Fellowship, 2009. \$25,000 for one-year public service internship. (One of three awarded campus wide.)
- Gabe Eckhouse, Haas Scholarship, 2011. Support for summer research and one-year capstone thesis project.

Graham Haught, Summer Undergraduate Research Fund (SURF) fellowship, 2012.

Service Activities

Faculty Senate Liaison to the External Review Committee for the Department of City and Regional Planning, University of California, Berkeley, 14-16 February 2018

Editorial Board Member, Annals of the American Association of Geographers, 1/2012-present

- Elected member, Honors Committee of the American Association of Geographers, 2/2016present (3 year term)
- Board Member, Malpai Borderlands Group, 4/2012-present
- Board Member, Gold Rush Heritage Foundation, 11/2017-present
- Faculty Advisory Board Member, Global Studies major, UC-Berkeley, 3/2017-present
- Faculty Advisory Board Member, Global Studies master's program, UC-Berkeley, 1/2017present
- Steering Committee, Graduate Program in Range, UC-Berkeley, 7/2017-present
- Faculty Director, Social Science Matrix, UC-Berkeley, 4/2013-6/2015
- Chair, Rangeland Ecology and Management Section, Ecological Society of America, 7/2011-6/2012
- Member, Berkeley Institute of the Environment Roundtable on Diversified Farming Systems, 2010-2013. Claire Kremen and Alastair Iles, organizers.

Faculty Coordinator, Berkeley Workshop on Environmental Politics, 6/2010-6/2012

- Member, Berkeley Faculty Senate Committee on Research, Fall 2011
- Editorial Board Member, Antipode, 7/2010-3/2014
- Member, Berkeley Institute of the Environment Faculty Roundtable on Environmental Services in Rangeland Production Systems, 2008-2010. James Bartolome, organizer.
- Geography Department Undergraduate Advisor for Human Geography, 7/2008-6/2013
- Member, Editorial Board, New Frontiers in Historical Ecology book series, Left Coast Press, 2008-present
- Member, Executive Committee, Environmental Politics Working Group, University of California, Berkeley, 2004-2012
- Member, Science Advisory Board, Malpai Borderlands Group, 2003-present
- Member, Advisory Board, Quivira Coalition, 2003-2008
- Member, Ranch Conservation Technical Advisory Team, Sonoran Desert Conservation Plan, Pima County, 1999-2003
- Advisor to Redington Natural Resource Conservation District, Cascabel, Arizona, 2000-2001

Manuscripts/proposals reviewed for (# of reviews):
Agriculture and Natural Resources Competitive Grants Program (University of California)
Annals of the American Association of Geographers (15)
Antipode (14)
Bancroft Library Fellowship Program (UC-Berkeley), 2015-2018
BioScience

Climatic Change Conservation Biology (7) Conservation Letters Cultural Anthropology Current Anthropology Ecological Applications Ecology and Society (10) Ecosphere Environment and Planning A (4)

Environment and Planning D: Society and Space Environmental History (2) Environmental Management (3) European Urban and Regional Studies Ford Foundation Fellowship Program France Berkeley Fund Frontiers in Ecology and the Environment Geoforum (8) Geographical Research The Geographical Review Global Ecology and Conservation Haas Scholars Program (UC-Berkeley) Human Dimensions of Wildlife Human Organization Island Press Journal of American History Journal of Applied Ecology Journal of Applied Remote Sensing Journal of Arid Environments Journal of Environmental Management Journal of Environmental Planning and Management *Journal of Historical Geography* (2) Journal of the Southwest Kroeber Anthropological Society Papers Land Landscape and Urban Planning Land Use Policy MIT Press National Fish and Wildlife Foundation National Geographic Society

National Science Foundation (4) New Frontiers in Historical Ecology Book Series (Left Coast Press) Nomadic Peoples Oxford University Press Palgrave Press Pastoralism: Research, Policy and Practice Plant Ecology The Professional Geographer Progress in Human Geography (3) Rangeland Ecology and Management (12) Rangelands (3) **SAPIENS** Social and Cultural Geography Springer Science Summer Undergraduate Research Fellowship (SURF) Program (UC-Berkeley) Tinker Research Grant Competition (UC-Berkeley) Transactions of the Institute of British Geographers (4) US Department of Agriculture-Cooperative State Research, Education and Extension Service University of Arizona Press University of California Press University of Chicago Press University of Iowa Press University of Nevada Press Yale University Press

Promotion / Tenure cases reviewed for:

Ohio University University of Arizona SUNY-Binghamton University of California, Santa Barbara University of California, Santa Cruz University of Wisconsin, Madison Utah State University

Guest Lectures (partial list)

ESPM 158: Biodiversity Conservation in Working Landscapes, 10 March 2016.

Law 220F: Food Law and Policy. Boalt School of Law, 20 January 2015.

MBA 292T.3B: Business Solutions for Global Mega Trends. Haas School of Business, 17 April 2014.

ESPM 186: Management and Conservation of Rangeland Ecosystems. 2009-2017, inclusive.

ESPM 201A: Research Approaches in Environmental Science, Policy, and Management. 1 October 2013.

Geog 137: Top 10 Global Environmental Problems. 2011, 2013.

Research Interests

Ranching and pastoralism, rangeland ecology and management, history of range science, local ecological knowledge (LEK), endangered species, scale, the state, Western environmental history, urbanization/land use change.

Professional Affiliations

American Association of Geographers Society for Range Management Ecological Society of America

Related Work Experience

Consultant, Malpai Borderlands Group (February 2002-March 2004)

- Prepared synthesis of literature relating to natural resources and socio-economic trends in area; wrote critical assessment of MBG activities to date and long-term plan for future.
- Consultant, Sonoran Institute, December 2001-June 2002

Assisted Altar Valley Conservation Alliance with research related to open space protection and possible Habitat Conservation Plan for ranch operations in the Altar Valley.

Project Manager, WestLand Resources, Tucson, AZ, November 1999-December 2000

Executed contract to complete Altar Valley Watershed Resource Assessment, including reports on Conservation Action Sites, Watershed Action Plan, and Ranch Management Plan Updates and Revisions.