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EDUCATION

Ph.D., Ecology, University of California at Davis, 2008. Dissertation: Livestock and wildlife effects on the successional development of a savanna landscape mosaic in East Africa. Advisor: Dr. Truman Young

B.A., Environmental, Population, and Organismic Biology, University of Colorado at Boulder, 1998. Summa cum Laude. Thesis: Native plant restoration in stands of *Eragrostis chloromelas* in southeastern Arizona. Advisor: Dr. Jane Bock

PROFESSIONAL EXPERIENCE

- 2011-present** Assistant Professor, Dept. of Wildland Resources and Ecology Center, Utah State University
- 2010-present** Research Associate, Dept. of Land Resource Management and Agricultural Technology, University of Nairobi
- 2008-2011** Research Ecologist, USGS Forest and Rangeland Ecosystem Science Center, Supervisor: Dr. David Pyke
- 2007-2008** Contractor, USGS Forest and Rangeland Ecosystem Science Center, Supervisor: Dr. David Pyke
- 2005-2006** Project Manager, Kenya Long-Term Exclosure Experiment (KLEE), Mpala Research Centre, Kenya, Supervisor: Dr. Truman Young
- 1998-2000** Community Forester, Peace Corps Ghana

PUBLICATIONS

35 peer-reviewed publications (31 journal articles, 4 book chapters and/or government reports)
20 with impact factor >3

* =grad student advisee (my lab)

** =undergraduate student advisee (my lab)

† =grad student/post-doc collaborator (other lab)

IF = 5-year ISI impact factor in year of publication

Peer-reviewed manuscripts in review and advanced stages of preparation:

Veblen, K.E., E.A. Beever, and D.A. Pyke. Context-dependent effects of livestock grazing in deserts of western North America. Book chapter in *Disturbance ecology and biological diversity: scale, context, and nature* (in review).

Updated March 1, 2017

- Riginos, C., L.M. Porensky, **K.E. Veblen**, and T.P. Young. Herbivory and drought generate short-term stochasticity and long-term stability in a savanna understory community (in review, *Ecological Applications* [IF=5.4 in 2015]).
- Germain, S.***, R.K. Mann*, T.A. Monaco, and **K.E. Veblen**. Short-term regeneration dynamics of Wyoming big sagebrush at two sites in northern Utah (in revision, *Western North American Naturalist* [IF=0.5 in 2015]).
- Koerner, S., M.D. Smith, D.E. Burkepile, N. Hanan, M.L. Avolio, S.L. Collins, A.K. Knapp, N.P. Lemoine, E.J. Forrester, S. Eby, D.I. Thompson, and The Grazing Exclusion Consortium [includes **K.E. Veblen**, K.C. Nehring* and >70 others]. Resolving variation in herbivore effects on plant biodiversity – dominance as a global mechanism (in review, *Nature Ecology & Evolution* [IF=NA]).
- Charles, G.K., C. Riginos, **K.E. Veblen**, D.M. Kimuyu, and T.P. Young. Unexpected dynamism in a stationary ecosystem engineer: rapid response of mound-building termites to biotic changes in a Kenyan savanna (in preparation).
- Wilder, L.E.*, **K.E. Veblen**, E. Thacker, J.G. Robins, K.L. Gunnell, D. Summers, J. Vernon, and T.A. Monaco. Effects of three shrub reduction treatments on seeded species establishment and persistence in Utah: a broad-scale assessment (in preparation).

Peer-reviewed journal articles published or in press:

1. Sensenig, R.L., D.M. Kimuyu[†], J.C Ruiz-Guajardo, **K.E. Veblen**, C. Riginos, and T.P. Young. Fire disturbance disrupts an acacia ant-plant mutualism in favor of a subordinate ant species (in press, *Ecology*) [IF=6.0 in 2015].
2. Monroe, A.P.[†], C.L. Aldridge, T.J. Assal, **K.E. Veblen**, D.A. Pyke, and M.L. Casazza. Patterns in wildlife population dynamics correspond with public grazing records at broad scales (in press, *Ecological Applications*) [IF=5.4 in 2015].
3. Kimuyu, D.M.[†], **K.E. Veblen**, C. Riginos, R.M. Chira, J.M. Githaiga, and T.P. Young. Influence of cattle on browsing and grazing wildlife varies with rainfall and presence of megaherbivores (in press, *Ecological Applications*; online at: <http://onlinelibrary.wiley.com/doi/10.1002/eap.1482/full>) [IF=5.4 in 2015].
4. Young, H.S., D.J. McCauley, R. Dirzo, C.L. Nunn, M.G. Campana, B. Agwanda, E.R. Otárola-Castillo, R.M. Pringle, **K.E. Veblen**, D.J. Salkeld, K. Stewardson, R. Fleischer, E. Lambin, T.M. Palmer, and K.M. Helgen. Interacting effects of land use and climate on rodent-borne pathogens in central Kenya (in press, *Philosophical Transactions of the Royal Society B*) [IF=7.2 in 2015].
5. Odadi, W.O., D.M. Kimuyu[†], **K.E. Veblen**, C. Riginos, and T.P. Young. Fire-induced negative nutritional outcomes for cattle when sharing habitat with native ungulates in an African savanna (in press, *J. Applied Ecology*; online at <http://onlinelibrary.wiley.com/doi/10.1111/1365-2664.12785/abstract>) [IF=6.0 in 2015].
6. Charles, G.K.[†], L.M. Porensky, C. Riginos, **K.E. Veblen**, and T. P. Young. 2017. Herbivore effects on herbaceous productivity vary by guild: cattle increase mean productivity while wildlife reduce variability. *Ecological Applications* 27: 143-155 [IF=5.4 in 2015].

7. Holthuijzen, M.F.* and **K.E. Veblen**. 2016. Grazing effects on precipitation-driven associations between sagebrush and perennial grasses. *Western North American Naturalist* 76: 313-325 [IF=0.5 in 2015].
8. **Veblen, K.E.**, L.M. Porensky, C. Riginos, and T.P. Young. 2016. Are cattle surrogate wildlife? Savanna plant community composition explained by total herbivory more than herbivore type. *Ecological Applications* 26: 1610-1623 [IF=5.4 in 2015].
9. Braithwaite, H.**; T. Bateman**, **K.E. Veblen**, E. Thacker, and J.J. Villalba. 2016. Identification of diet supplements for management of elk distributions. *The Wildlife Society Bulletin* 40:368-374 [IF=1.4 in 2008].
10. Young, H.S., R. Dirzo, K.M. Helgen, D.J. McCauley, C. Nunn, P. Snyder, **K.E. Veblen**, S. Zhao, and V.O. Ezenwa. 2016. Large wildlife removal drives immune defence increases in rodents. *Functional Ecology* 30: 799-807 [IF=5.3 in 2015].
11. Holthuijzen, M.F.* and **K.E. Veblen**. 2015. Grass-shrub spatial associations over a precipitation gradient and their implications for restoration in the Great Basin, USA. PLoS ONE 10(12): e0143170. doi:10.1371/journal.pone.0143170 [IF=3.5].
12. Pringle, R.M., D.M. Kimuyu[†], R.L. Sensenig, T.M. Palmer, C. Riginos, **K.E. Veblen** and T.P. Young. 2015. Synergistic effects of fire and elephants on arboreal animals in an African savannah (*Journal of Animal Ecology* 84: 1637-1645 [IF=5.2]).
13. Munson, S.M., R.H. Webb, D. Housman; **K.E. Veblen**, K.E. Nussear, E.A. Beever, K.B. Hartney, M.N. Miriti, S.L. Phillips, R.E. Fulton, and N.G. Tallent. 2015. Long-term plant responses to climate are moderated by biophysical attributes in a North American desert. *Journal of Ecology* 103:657-668 [IF=6.4].
14. Porensky, L.M. and **K.E. Veblen**. 2015. Generation of ecosystem hotspots using short-term cattle corrals in an African savanna. *Rangeland Ecology and Management* 68:131-141 [IF=1.7]
15. Young, T.P. and **K.E. Veblen**. 2015. Strong recruitment from sparse plug plantings of native California bunchgrasses. *Grasslands* 25:9-11. [IF=not indexed]
16. **Veblen, K.E.**, K.C. Nehring*, C.M. McGlone, and M.E. Ritchie. 2015. Contrasting effects of different mammalian herbivores on sagebrush plant communities. PLoS ONE 10(2): e0118016. doi: 10.1371/journal.pone.0118016 [IF=3.5]
17. Kimuyu, D.M. [†], R.L. Sensenig, C. Riginos, **K.E. Veblen**, and T.P. Young. 2014. Native and domestic browsers and grazers reduce fuel loads, fire temperatures, and acacia-ant mortality in an African savanna. *Ecological Applications* 24: 741-749 [IF=5.5]
18. **Veblen, K.E.**, D.A. Pyke, C. L. Aldridge, M.L. Casazza, T.J. Assal, and M.A. Farinha. 2014. Monitoring of livestock grazing effects on Bureau of Land Management land. *Rangeland Ecology and Management* 67: 68-77 [IF=2.1]
19. **Veblen, K.E.** 2013. Impacts of traditional livestock corrals on woody plant communities in an East African savanna. *Rangeland Journal* 35: 349-353. [IF=1.4]
20. Porensky, L.M., S.F. Bucher, **K.E. Veblen**, A.C. Treydte, and T.P. Young. 2013. Megaherbivores and cattle alter edge effects around ecosystem hotspots in an African savanna. *Journal of Arid Environments* 96: 55-63. [IF=2.1]

21. Riginos, C., L.M. Porensky, **K.E. Veblen**, W.O. Odadi, R.L. Sensenig, D.M. Kimuyu[†], F. Keesing, M.L. Wilkerson and T.P. Young. **2012**. Lessons on the relationship between livestock husbandry and biodiversity from the Kenya Long-term Exclosure Experiment (KLEE) *Pastoralism: Research, Policy and Practice* 2:10. [IF=Indexed in 2014; No IF yet]
22. Porensky, L.M. and **K.E. Veblen**. **2012**. Grasses and browsers reinforce landscape heterogeneity by excluding trees from ecosystem hotspots. *Oecologia* 168:749-759. [IF=3.8]
23. **Veblen, K.E.** **2012**. Savanna glade hotspots: plant community development and synergy with large herbivores. *Journal of Arid Environments* 78:119-127. [IF=2.1]
24. Holmes, K.A., **K.E. Veblen**, T.P. Young, and A.M. Berry. **2011**. Effects of prescribed fires on young valley oak trees at a research restoration site in the Sacramento Valley. *Restoration Ecology* 19:118-125. [IF=2.5]
25. **Veblen, K.E.** and T.P. Young. **2010**. Contrasting effects of cattle and wildlife on the vegetation development of a savanna landscape mosaic. *Journal of Ecology* 98: 993-1001. [IF=5.7]
26. **Veblen, K.E.** and T.P. Young. **2009**. A California grasslands alkali specialist, *Hemizonia pungens pungens*, prefers non-alkali soil. *Journal of Vegetation Science*. 20:170-176. [IF=3.0]
27. Chang, A. L., J.D. Grossman, T.S. Spezio, H.W. Weiskel, J.C. Blum, J.W. Burt, A.A. Muir, J. Piovia-Scott, **K.E. Veblen**, and E.D. Grosholz. **2009**. Tackling aquatic invasions: risks and opportunities for the aquarium fish industry. *Biological Invasions*: 11:773-785. [IF=3.6]
28. **Veblen, K.E.** **2008**. Season- and herbivore-dependent competition and facilitation in a semi-arid savanna. *Ecology* 89: 1532-1540. [IF=6.1]
29. **Veblen, K.E.**, K.A. Holmes, and T.P. Young. **2007**. Response of one-year-old planted native grasses to controlled burns (California). *Ecological Restoration* 25: 50-51. [IF=not indexed]
30. Burt, J.W., A.A. Muir, J. Piovia-Scott, **K.E. Veblen**, A.L. Chang, J.D. Grossman, and H.W. Weiskel. **2007**. Preventing horticultural introductions of invasive plants: potential efficacy of voluntary initiatives. *Biological Invasions* 9: 909-923. [IF=3.6 in 2009]
31. Dawson, K.**, **K.E. Veblen**, and T.P. Young. **2007**. Experimental evidence for an alkali ecotype of *Lolium multiflorum*, an exotic invasive annual grass in the Central Valley, CA, USA. *Biological Invasions* 9: 327-334. [IF=3.6 in 2009]

Peer-reviewed book chapters and agency reports:

32. Assal, T.J., **K.E. Veblen**, M.A. Farinha, C.L. Aldridge, M.L. Casazza, and D.A. Pyke. **2012**. Data Resources for Range-wide assessment of livestock grazing across the sagebrush biome: U.S. Geological Survey Data Series 690, posted 6/13/12.
33. **Veblen, K.E.**, D.A. Pyke, C.L. Aldridge, M.L. Casazza, T.J. Assal, and M.A. Farinha. **2011**. Range-wide assessment of livestock grazing across the sagebrush biome: U.S. Geological Survey Open-File Report 2011-1263, 74 pp.
34. Augustine, D.J., **K.E. Veblen**, J.R. Goheen, C. Riginos and T.P. Young. **2011**. Pathways for positive cattle-wildlife interactions in semi-arid rangelands. *Conserving Wildlife in African Landscapes: Kenya's Envaso Ecosystem* (Ed. N.J. Georgiadis), pp. 55-71. Smithsonian Contributions to Zoology no. 632. Smithsonian Institution Scholarly Press.

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35. Holmes, K.A., **K.E. Veblen**, T.P. Young and A.M. Berry. **2008**. California oaks and fire: a review and case study. Pages 551-565 in Merenlender, A., D. McCreary, and K.L. Purcell, technical editors. *Proceedings of the Sixth California Oak Symposium: Today's Challenges, Tomorrow's Opportunities*. 2006, October 9-12. General Technical Report PSW-GTR-217. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture.

Reports (non-peer-reviewed):

- Duncan, B.*, D. McAvoy, **K.E. Veblen**, H. Van Miegroet, R. Ryel, and S. Stickney. **2014**. Monitoring effects of PJ harvest and utilization, Final Report to USFS.

Outreach publications:

- Bartlett, H., E. Ermgassen, **K.E. Veblen**, and others. *In prep*. Summary of the impact of ruminant grazing on biodiversity, hydrology and climate. Food Climate Research Network Food source website: <http://foodsource.org.uk/>.

- Veblen, K.E.**, L.M. Porensky and T.P. Young. Ecological restoration. *Encyclopaedia Britannica* (in press)

- Veblen, K.E.**, B.A. Newingham, J. Bates, E.M. LaMalfa*, and J. Gicklhorn[†]. **2015**. Post-fire grazing management in the Great Basin. Great Basin Factsheet Series no. 7. ****Invited & Peer-reviewed**** Available at: <http://www.sagegrouseinitiative.com/post-fire-grazing-management-in-the-great-basin/>

- Mann, R.K.*, T.A. Monaco, **K.E. Veblen**, and J.R. Williams. 2015. *Utah Shrubland Management Newsletter*, Volume 5 (Spring 2015).

- Mann, R.K.*, T.A. Monaco, **K.E. Veblen**, and J.R. Williams. 2015. *Utah Shrubland Management Newsletter*, Volume 4 (Winter 2014/2015).

- Mann, R.K.*, T.A. Monaco, **K.E. Veblen**, and J.R. Williams. 2014. *Utah Shrubland Management Newsletter*, Volume 3 (Winter 2013/2014).

- Young, T.P., R.L. Sensenig, D.M. Kimuyu, C. Riginos, and **K.E. Veblen**. 2013. Livestock and wildlife reduce fire intensity. (KLEE Corner #18) *Laikipia Wildlife Forum Newsletter*. November issue.

- Mann, R.K.*, T.A. Monaco, **K.E. Veblen**, and J.R. Williams. 2013. *Utah Shrubland Management Newsletter*, Volume 2 (Summer 2013).

- Mann, R.K.*, T.A. Monaco, **K.E. Veblen**, and J.R. Williams. 2013. *Utah Shrubland Management Newsletter* Volume 1 (Spring 2013).

- Porensky, L.M., K.E. Veblen, and T.P. Young. 2011. What is so special about glade edges? (KLEE Corner #16). *Laikipia Wildlife Forum Newsletter* July issue.

- Veblen, K.E.** and L.M. Porensky. 2011. To move or not to move: optimizing the benefits of mobile bomas. *Mpala Research Centre Newsletter*, July issue.

- Veblen, K.E.** and T.P. Young. 2011. Plants helping plants in defense against cattle and wildlife. *Laikipia Wildlife Forum Newsletter*, January issue.

- Veblen, K.E.** Cattle and wildlife affect development of old boma sites. 2009. *Laikipia Wildlife Forum Newsletter*, January issue.

PRESENTATIONS

* =grad student advisee (my lab)

† =grad student/post-doc collaborator (other lab)

** =undergraduate student advisee

Invited presentations (external to home institution):

Veblen, K.E. and K.C. Nehring*. 2017. The role of livestock and wild ungulate herbivory in shaping sagebrush landscapes. To be presented at invited Organized Session “Cascading effects of large mammalian herbivores in terrestrial systems: community-, ecosystem-, and landscape-level consequences” at the Annual Meeting of the Ecological Society of America (ESA), Portland, OR. August, 2017.

Riginos, C., **K.E. Veblen**, W.O. Odadi, D.M. Kimuyu†, L.M. Porensky, G.K. Charles†, and T.P. Young 2017. Planning for serendipity: the importance of surprises in long-term ecological research. To be presented at invited Organized Session “Surprising positive interactions between cattle and wildlife in an African savanna” at the Annual Meeting of the Ecological Society of America (ESA), Portland, OR. August, 2017.

Young, T.P., **K.E. Veblen**, C. Riginos, D. Kimuyu†, W. Odadi, L.M. Porensky, R.L. Sensenig, E.M. LaMalfa*, and G.K. Charles†. 2017. Exploring the meaning of synergy in a multi-guild large herbivore experiment. To be presented at invited Organized Session “Cascading effects of large mammalian herbivores in terrestrial systems: community-, ecosystem-, and landscape-level consequences” at the Annual Meeting of the Ecological Society of America (ESA), Portland, OR. August, 2017.

Veblen, K.E. and K.C. Nehring*. 2016. Cattle and wild ungulate effects on sagebrush rangelands. Presentation at 2016 Canyon Country Science and Management Symposium in Moab, UT. December 2016.

Veblen, K.E. and K.C. Nehring*. 2016. Cattle and wild ungulate effects on sagebrush rangelands in Utah. Presented at 2016 Utah Society for Range Management meeting in Richfield, UT. November 2016.

Young, T.P., K. Gravuer, G.K. Charles†, H. Young, C. Riginos and **K.E. Veblen**. 2016. Microbes and Megaherbivores: initial patterns from the Kenya Long-term Exclosure Experiment (KLEE). Invited speaker, STRI Microbial Science Symposium, Smithsonian Tropical Research Institute, Panama, 27 October 2016.

Young, T. P., **K.E. Veblen**, C. Riginos, D. Kimuyu†, W. Odadi, G.K. Charles†, L.M. Porensky, F. Keesing, and R.L. Sensenig. 2016. Competition and Compatibility in the Kenya Long-Term Exclosure Experiment. Brigham Young University, Feb 25, 2016.

Monroe, A.P.†, C.L. Aldridge, T.J. Assal, **K.E. Veblen**, D.A. Pyke, and M.L. Casazza. 2016. Greater sage-grouse response to grazing timing and intensity in Wyoming. Presented at 2016 Great Basin Consortium Meeting in Salt Lake City, UT. March, 2016.

Young, T.P., D.M. Kimuyu†, C. Riginos, **K.E. Veblen**, L.M. Porensky, W. Odadi, F. Keesing, G.K. Charles†, R.M. Pringle & H.S. Young. 2015. Interactions between Cattle and Biodiversity: The Kenya Long-Term Exclosure Experiment (KLEE). Presented at University of Colorado at Boulder, Dept. of Environmental Studies Brown Bag Lunch Series. September, 2015.

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- LaMalfa, E. M.*, D.M. Kimuyu[†], R.L. Sensenig, C. Riginos, T.P. Young, and **K.E. Veblen**. 2015. Unraveling Fire and Herbivore Interactions to Manage Tree cover in an African Savanna. Presented at the 2015 Restoring the West Conference in Logan, UT. October, 2015.
- Gicklhorn, J.[†], B.A. Newingham, J. Bates, E.M. LaMalfa*, and **K.E. Veblen**. 2015. Post-fire grazing management in the Great Basin. Presentation at 2015 Restoring the West Conference in Logan, UT. October, 2015.
- Young, T.P., **K.E. Veblen**, C. Riginos, W.O. Odadi, and D.M. Kimuyu. 2015. Conflict and coexistence between livestock and biodiversity in an African savanna. Presentation at Meeting of the Critical Ecosystem Partnership Fund (CEPF), Laikipia Kenya. July, 2015.
- Veblen, K.E.**, D.A. Pyke, T. Wirth, M.F. Holthuijzen*, and N. DeCrappeo. 2015. Restoring native perennial herbs while retaining shrubs in Great Basin sagebrush communities. Presentation at 2015 National Native Seed Conference in Santa Fe, NM. April, 2015.
- Young, T.P., G.K. Charles, **K.E. Veblen**, C. Riginos, and L.M. Porensky. 2014. A tale of two hotspots: the roles of termites, elephants, and cattle in creating and maintaining landscape heterogeneity. Groningen University, Netherlands. December, 2014.
- Young, T.P., K. J. Vaughn, **K.E. Veblen**, C. Riginos, L.M. Porensky, W. Odadi, E.P. Zefferman and S. Fick. 2014. The nature of species interactions shifts dramatically between time periods. Presented at 2014 Ecological Society of America meeting in Sacramento, CA. August, 2014.
- Veblen, K.E.** 2014. Context-dependent plant community dynamics and applications to rangeland systems. USDA Agricultural Research Service (ARS), Reno, NV. April, 2014.
- Veblen, K.E.**, J. Johanson, T. Monaco. 2013. Use of the NRCS Ecological Site Framework to Improve Ecological Understanding in Restoration Projects. Ignite presentation at 2013 Ecological Society of America meeting in Minneapolis, MN. August, 2013.
- Veblen, K.E.** 2013. Plant community dynamics and livestock-wildlife interactions in semi-arid rangelands. University of Nairobi, Center for Sustainable Dryland Ecosystem and Societies, Department of Land Resources Management and Agricultural Technology, Invited seminar. July, 2013.
- Veblen, K.E.** 2013. Context-dependent plant community dynamics and applications to rangeland systems. University of Wyoming, Department of Zoology & Physiology Seminar. January, 2013.
- Veblen, K.E.** 2010. Plant-herbivore interactions in an East African rangeland mosaic, Utah State University, Department of Wildland Resources. April, 2010. (Prior to starting at USU)
- Veblen, K.E.** 2009. Plant community dynamics and large herbivores in an East African rangeland mosaic, Oregon State University, Department of Rangeland Ecology and Management. January, 2009.
- Veblen, K.E.** 2009. Large herbivores drive the development of an East African savanna mosaic. University of Puget Sound, Thompson Hall Mathematics and Sciences Seminar. April, 2009.

Invited presentations (internal to home institution):

- Nehring, K.C.* and **K.E. Veblen**. 2017. Impact of soil properties and ungulate herbivory on big sagebrush (*Artemisia tridentata*) stress response and survival. To be presented at UDWR Brown Bag Lunch seminar series. April, 2017.

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- Veblen, K.E.** 2017. Livestock and wild ungulate effects on rangeland plant communities in Kenya and Utah. Department of Wildland Resources seminar series. February, 2017.
- Monaco, T.A. and **K.E. Veblen**. 2015. Assessing vegetation change and seeding success on Utah Watershed Restoration Initiative project sites: a cooperative, team effort. UDWR Brown Bag Lunch Seminar Series. October, 2015.
- Veblen, K.E.** 2012. Context-dependent community dynamics and applications to rangeland systems. Utah State University, Ecology Center Interdisciplinary Lunch. December, 2012.
- Veblen, K.E.** 2012. Ecosystem effects of livestock grazing on multiple use lands, Utah State University, Department of Wildland Resources Seminar. January, 2012.
- Veblen, K.E.** 2012. Plant –herbivore interactions and restoration ecology on multi-use lands. USGS Co-op Annual Partners Meeting, Utah State University. May, 2012.

Contributed presentations:

- Charles, G.K.*, T.P. Young, C. Riginos, **K.E. Veblen**, and D.M. Kimuyu[†]. Diversity does not always beget diversity: multiple herbivore guilds combine to contribute to the maintenance of low woody diversity in an African savanna ecosystem. In review for presentation at the Annual Meeting of the Ecological Society of America (ESA), Portland, OR. August, 2017.
- LaMalfa, E.M.*, C. Riginos, and **K.E. Veblen**. Acacia sapling escape following a decade of grass removal and herbivory manipulations in an East African savanna. In review for poster presentation at the Annual Meeting of the Ecological Society of America (ESA), Portland, OR. August, 2017.
- Nehring, K.C.* and **K.E. Veblen**. Soil texture alters the impact of ungulate herbivory on big sagebrush (*Artemisia tridentata*) density and size structure. In review for presentation at the Annual Meeting of the Ecological Society of America (ESA), Portland, OR. August, 2017.
- Pyke, D.A., J. Gicklhorn[†], B.A. Newingham, M. Trask, and **K.E. Veblen**. 2017. Tiller demography of two common Great Basin bunchgrasses after fires. In review for presentation at the Annual Meeting of the Ecological Society of America (ESA), Portland, OR. August, 2017.
- Veblen, K.E., C. Riginos, K. Gunnell, and T.A. Monaco. 2017. Evaluation of the effects of wildfire and shrub reduction projects on sagebrush rangelands across Utah. To be presented at 2017 Society for Range Management in St. George, UT. February, 2017.
- Taylor, J.***, **K.E. Veblen**, E. Thacker, and J.J. Villalba. 2017. Energy- and protein-based supplements improve decadent sagebrush use by elk. To be presented as a poster at 2017 Society for Range Management in St. George, UT. February, 2017.
- LaMalfa, E.*, D.M. Kimuyu[†], R.L. Sensenig, C. Riginos, T.P. Young, **K.E. Veblen**. 2016. Elephants and wildlife browsers limit tree re-sprout responses following experimental fires. Poster Presentation at the 2016 Ecological Society of America annual meeting in Fort Lauderdale, FL. August, 2016.
- Kimuyu, D.M.[†], **K.E. Veblen**, C. Riginos. and T.P. Young. Interactions between livestock, biodiversity and fire: some lessons from the Kenya Long-Term Exclosure Experiment (KLEE). Poster at NACOSTI 5th National Science Meeting in Nairobi, Kenya. May, 2016.

- LaMalfa, E.*, D.M. Kimuyu[†], R.L. Sensenig, C. Riginos, T.P. Young, and **K.E. Veblen**. 2016. Fire and herbivore interactions limit tree demographic transitions East African savannas: how do juveniles persist? Presentation at USU Student Research Symposium. April, 2016.
- Germain, S.J.**, G.K. Charles[†], T.P. Young, and **K.E. Veblen**. 2016. Responses of plant functional traits to grazing in a Kenyan savannah. Presentation at USU Student Research Symposium. April, 2016.
- Newingham, B.A., **K.E. Veblen**, J. Bates, E.M. LaMalfa*, and J.[†] Gicklhorn. 2016. Post-fire grazing management in the Great Basin. Poster presentation at 2016 Great Basin Consortium Meeting in Salt Lake City, UT. February, 2016.
- Mann, R.K.*, **K.E. Veblen** and T.A. Monaco. 2016. The Ecological-Site based Shrub Management Handbook for Utah: Bringing current research to the range. Poster presentation at 2016 Society for Range Management Meeting in Corpus Christi, TX. February, 2016.
- Veblen, K.E.**, L.M. Porensky, C. Riginos, and T.P. Young. 2016. Are cattle surrogate wildlife? Separate and additive effects of wild and domestic herbivores suggest broad ecological equivalence with respect to herbaceous plant community composition. Presentation at 2016 Society for Range Management Meeting in Corpus Christi, TX. February, 2016.
- D.M. Kimuyu[†], C. Riginos, **K.E. Veblen**, and T.P. Young. 2016. Some lessons on the impact of cattle on wildlife from the Kenya Long-term Exclosure Experiment (KLEE), Laikipia, Kenya. Presentation at Pathways Kenya 2016: Integrating human dimensions into fisheries and wildlife management meeting, Laikipia, Kenya. January 2016.
- Monroe, A.P.[†], C.L. Aldridge, T.J. Assal, **K.E. Veblen**, D.A. Pyke, and M.L. Casazza. 2015. Greater sage-grouse response to grazing timing and intensity in Wyoming. Presented at 2015 The Wildlife Society, Wyoming Chapter meeting. November, 2015.
- Monroe, A.P.[†], C.L. Aldridge, T.J. Assal, **K.E. Veblen**, D.A. Pyke, and M.L. Casazza. 2015. Greater sage-grouse (*Centrocercus urophasianus*) population response to grazing management and precipitation across broad scales in Wyoming. Presented at 2015 America's Grassland Conference, Sept 29-Oct 31. Fort Collins, CO. September, 2015.
- Monroe, A.P.[†], C.L. Aldridge, T.J. Assal, **K.E. Veblen**, D.A. Pyke, and M.L. Casazza. Broad-scale population response of Greater sage-grouse (*Centrocercus urophasianus*) to grazing management and precipitation. Presentation at 2015 International Grouse Symposium, Sept 4-7, Reykjavik, Iceland. September, 2015.
- Germain, S.**, R.K. Mann*, **K.E. Veblen**, and T.A. Monaco. 2015. Sagebrush seedling recruitment following tebuthiuron application. Presentation at USU Student Research Symposium. April, 2015. ****1st place in undergraduate student presentation competition****
- LaMalfa, E.* and **K.E. Veblen**. 2015. Fire herbivore trap: effects of herbivory on post-fire tree re-sprout size and morphology in *Acacia drepanolobium* savanna. Presentation at USU Student Research Symposium. April, 2015.
- Veblen, K.E.**, D.A. Pyke, T. Wirth, M.F. Holthuijzen, and N. DeCrappeo. 2015. Targeting shrub and interspace microsites for restoration seedlings and plantings in Great Basin sagebrush communities. Presentation at 2015 Society for Range Management meeting in Sacramento, CA. February, 2015.

- Mann, R.K.*, **K.E. Veblen**, and T.A. Monaco. 2015. Variation in competitive ability of bottlebrush squirreltail (*Elymus elymoides*) populations. Presentation at 2015 Society for Range Management meeting in Sacramento, CA. February, 2015.
- Braithwaite, H.***, T. Bateman**, J.J. Villalba, **K.E. Veblen**, and E. Thacker. 2015. Identification of diet supplements for elk management. Presentation at 2015 Society for Range Management meeting in Sacramento, CA. February, 2015.
- Young, T.P., C. Riginos, **K.E. Veblen**, W. Odadi, D.M. Kimuyu. 2015. Trophic interactions between cattle and biodiversity: the Kenya Long-term Exclosure Experiment (KLEE). Presentation at 2015 Society for Range Management meeting in Sacramento, CA. February, 2015.
- Germain, S.***, R.K. Mann*, **K.E. Veblen**, and T.A. Monaco. 2014. Sagebrush seedling recruitment following tebuthiuron application. Presentation at 2014 Utah Society for Range Management meeting in Logan, UT. November, 2014.
- Duncan, B.D.*, **K.E. Veblen**, and K.M. Kettenring. 2014. Costs and benefits of using grazing as a management tool to remove *Phragmites australis* in wetlands: An upcoming project. Presentation at 2014 Utah Society for Rangeland Management meeting in Logan, UT. November, 2014.
- LaMalfa, E.* and **K.E. Veblen**. 2014. Fire, cattle and wildlife interactions: Effects on trees and herbaceous community in East African rangeland. Presentation at 2014 Utah Society for Range Management meeting in Logan, UT. November, 2014.
- Germain, S.***, **K.E. Veblen**, and R.K. Mann*. 2014. Sagebrush seedling recruitment following tebuthiuron treatment. Poster at Fall 2014 USU SURCO symposium. September, 2014.
- Holthuijzen, M.F*, **K.E. Veblen**, D.A. Pyke and T.A. Monaco. 2014. Grass-shrub spatial pattern response to a moisture gradient in Great Basin sagebrush communities. Presentation at 2014 Ecological Society of America meeting in Sacramento, CA. August, 2014.
- Nehring, K.C.*, **K.E. Veblen**, and T.J. Zelikova. 2014. Interactive effects of large ungulates and abiotic factors on state shifts in sagebrush plant communities. Poster at 2014 Ecological Society of America meeting in Sacramento, CA. August, 2014.
- Veblen, K.E.**, K.C. Nehring*, C.M. McGlone, and M.E. Ritchie. 2014. Cattle-wild ungulate effects on sagebrush plant communities. Poster at 2014 Ecological Society of America meeting in Sacramento, CA. August, 2014.
- Kimuyu, D.M.[†], R.L. Sensenig, C. Riginos, **K.E. Veblen**, and T.P. Young. 2014. Native and domestic browsers and grazers reduce fuel loads, fire temperatures, and acacia-ant mortality in an African savanna. Poster at 2014 Ecological Society of America meeting in Sacramento, CA. August, 2014.
- Braithwaite, H.***, T. Bateman**, J.J. Villalba, **K.E. Veblen**, and E. Thacker. 2014. Identification of diet supplements for elk management. Poster at 2014 Utah State University Research Week Undergraduate Student Showcase in Logan, UT. April, 2014.
- Kimuyu, D.M.[†], R.L. Sensenig, C. Riginos, **K.E. Veblen**, and T.P. Young. 2014. Interactive effects of fire and herbivory on survival of acacia-ant symbionts in an African savanna. Presentation at Savanna Science Networking meeting, Kruger National Park, South Africa. March, 2014.

- Braithwaite, H.***, T. Bateman**, J.J. Villalba, **K.E. Veblen**, and E. Thacker. 2014. Identification of diet supplements for elk management. Poster at 2014 Utah Wildlife Society meeting in St. George, UT. March, 2014. ****Winner of Utah TWS Chapter Research Award****
- Nehring, K.C.*, **K.E. Veblen**, T. J. Zelikova. 2014. Large ungulate effects on sagebrush plant communities: implications for maintaining vital forage habitat for multiple ungulate species. Presentation at 2014 Utah Wildlife Society meeting in St. George, UT. March, 2014. ****3rd place in student presentation competition****
- Nehring, K.C.*, **K.E. Veblen**, C.M. McGlone, and M.E. Ritchie. 2014. Cattle-wild ungulate effects on sagebrush plant communities in northern Utah. Presentation at 2014 Society for Range Management meeting in Orlando, FL. February, 2014.
- Porensky, L.M. and **K.E. Veblen**. 2014. Pinpointing ecological thresholds: how much cattle impact is needed to generate persistent ecosystem hotspots? Presentation at 2014 Society for Range Management meeting in Orlando, FL. February, 2014.
- Nehring, K.C.*, **K.E. Veblen**, and T.J. Zelikova. 2013. Long-term patterns of wild and domestic ungulate effects on rangeland plant communities of the Colorado Plateau. Presentation at the 2013 Utah Society for Range Management Annual Meeting, Cedar City, UT. November, 2013.
- Mann, R.K.*, **K.E. Veblen**, and T.A. Monaco. 2013. Shrub management in Utah: An experimental framework to investigate how ecological sites may guide management decisions. Presentation at the 2013 Utah Society for Range Management Annual Meeting, Cedar City, UT. November, 2013.
- Holthuijzen, M.F.* and **K.E. Veblen**. 2013. Grass-shrub spatial associations over a precipitation gradient in the Great Basin, USA: insights into ecological restoration. Poster at the 2013 Restoring the West Conference in Logan, UT. October, 2013.
- Veblen, K.E.**, M.F. Holthuijzen*, T.A. Wirth, N. DeCrappeo, and D.A. Pyke. 2013. Plant responses to rainfall and microsite in sagebrush communities: Keys to restoration success in the Great Basin? Presentation at the 2013 Ecological Society of America meeting in Minneapolis, MN. August, 2013.
- Riginos, C., **K.E. Veblen**, L.M. Porensky, and T.P. Young. 2013. Cattle, wild herbivores, and drought interact to drive vegetation change over 17 years in an East African savanna. Presentation at the 2013 Ecological Society of America meeting in Minneapolis, MN. August, 2013.
- Veblen, K.E.** 2012. Alternative pathways for development of meso-scale wildlife hotspots in an East African savanna. Poster at the 2012 Ecological Society of America meeting in Portland, OR. August, 2012.
- Veblen, K.E.**, E.A. Beaver, M. Huso, and D.A. Pyke. 2011. Long-term ecosystem responses to livestock removal in the Mojave Desert. Presented at the 2011 Ecological Society of America meeting in Austin, TX. August, 2011.
- Porensky, L.M., **K.E. Veblen**, and T.P. Young. 2011. Grasses and large herbivores enhance landscape heterogeneity by excluding a savanna tree from ecosystem hotspots. Presentation at the 2011 Ecological Society of America meeting in Austin, TX. August, 2011.

- Veblen, K.E.**, D.A. Pyke, C. L. Aldridge, M.L. Casazza, T. Assal, and M.A. Farinha. 2011. Monitoring of Livestock Grazing Effects on Bureau of Land Management. Poster at the 2011 Society for Range Management meeting in Billings, MT. February, 2011.
- Veblen, K.E.**, D.A. Pyke, C. L. Aldridge, M.L. Casazza, T. Assal, and M.A. Farinha. 2009. Assessment of livestock grazing effects and land management in sagebrush steppe across the western United States. Poster at the 2009 Ecological Society of America meeting in Albuquerque, NM. August, 2009.
- Veblen, K.E.** 2009. Cattle drive the development of wildlife hotspots in an East African rangeland. Presented at the 2009 Society for Range Management meeting in Albuquerque, NM. February, 2009.
- Veblen, K.E.** and T.P. Young. 2008. Cattle and wildlife effects on persistence of a successional savanna landscape mosaic. Presented at the 2008 Ecological Society of America meeting in Milwaukee, WI. August 2008.
- Veblen, K.E.** 2008. Effects of brush addition, tree clearing and nutrient addition on boma-glade development. Poster at July, 2008 Laikipia Wildlife Forum meeting, Kenya. July, 2008.
- Veblen, K.E.** 2008. The ecology of abandoned cattle corrals in Laikipia, Kenya. Poster at the 2008 Bay Area Conservation Symposium, Davis, CA. January, 2008.
- Veblen, K.E.** 2007. Season- and herbivore-mediated competition and facilitation in a semi-arid savanna. Presented at the 2007 Ecological Society of America meeting in San Jose, CA. August, 2007.
- Veblen, K.E.** 2007. Anthropogenic productivity hotspots influence long-term ecosystem biodiversity. Presented at the 2007 Society for Conservation Biology meeting in Port Elizabeth, South Africa. July, 2007.
- Young, T.P., C. Warui, B. Okello, R.M. Pringle, **K.E. Veblen**, C. Riginos, R. Erii. 2007. KLEE: the first 12 years of an experimental approach to livestock-biodiversity interactions. 2007 21st Annual Meeting of the Society for Conservation Biology, Port Elizabeth South Africa, July 1-5, 2007. July, 2007.
- Veblen, K.E.**, K. Dawson and T.P. Young. 2007. Invasion resistance (and invasion) of *Hemizonia*-dominated alkali sinks in a *Lolium* annual grassland in the Central Valley of California. Presented at 2007 California Native Grasslands Association meeting in Santa Barbara, CA. May, 2007.
- Holmes, K.A., **K.E. Veblen**, T. P. Young, A.M. Berry. 2007. Effect of Prescribed Fires on Young Valley Oaks and Native Bunchgrasses. Presented at 2007 California Native Grasslands Association meeting in Santa Barbara, CA. May, 2007.
- Burt, J.W., A.A. Muir, J. Piovita-Scott, **K.E. Veblen**, A.L. Chang, J.D. Grossman, and H.W. Weiskel. 2007. Invasive plants for sale! A survey of nursery professionals. Presented at 2007 California Native Grasslands Association meeting in Santa Barbara, CA. May, 2007.
- Burt, J.W., A.A. Muir, J. Piovita-Scott, **K.E. Veblen**, A.L. Chang, J.D. Grossman, and H.W. Weiskel. 2007. Invasive plants for sale! A survey of nursery professionals. 2007 California Invasive Plant Council (Cal-IPC) Symposium: "Communication and Conservation: The Human Dimension in Invasive Plant Management", San Diego, California. September, 2007.

- Veblen, K.E.** 2006. Footprints on the landscape: former boma sites in an East African savanna. Presented at the 2006 Biodiversity in Inhabited Areas of East Africa conference, Kampala, Uganda. July, 2006.
- Veblen, K.E.** 2006. The Ecology of Black Cotton Glades. Poster at July, 2006 Laikipia Wildlife Forum meeting, Kenya. July, 2006.
- Piovia-Scott, J., J.W. Burt, A.A. Muir, **K.E. Veblen**, A. Chang, J.D. Grossman, and H. Weiskel. 2006. Potential efficacy of self-regulation to prevent invasive plant introductions via the horticulture trade. 8th Annual Bay Area Conservation Biology Symposium, February 4, 2006, San Francisco State University. February, 2006.
- Chang, A.L., J.D. Grossman, T.S. Spezio, H.W. Weiskel, J.W. Burt, A.A. Muir, J. Piovia-Scott, and **K.E. Veblen**. 2006. Potentially Invasive Non-native Aquarium Fish and the San Francisco Bay-Delta Region. 14th International Conference on Aquatic Invasive Species, May 14-19th, 2006, Key Biscayne, Florida. May, 2006.
- Holmes, K.A., **K.E. Veblen**, T. P. Young, A.M. Berry. 2006. Effects of Prescribed Fires on Young Valley Oak Trees. Sixth California Oak Symposium, Oct. 10, 2006, Rohnert Park, CA. Burt, J.W., A.A. Muir, J. Piovia-Scott, **K.E. Veblen**. 2005. Invasive species and the horticulture trade: finding effective solutions. Coast Quarantine Group Meeting, November 9, 2005, Dublin, CA. October, 2006.
- Burt, J.W., A.A. Muir, J. Piovia-Scott, and **K.E. Veblen**. 2005. Perspectives of Nursery Professionals on Invasive Plants and the St. Louis Voluntary Codes of Conduct. CA Invasive Plant Council (Cal-IPC) 2005 Symposium, Prevention Reinvention: Protocols, Information, and Partnerships to Stop the Spread of Invasive Plants, October 6-8, 2005, Chico State University, California. October, 2005.
- Burt, J.W., A.A. Muir, J. Piovia-Scott, and **K.E. Veblen**. 2005. Symposium presentation: Gardens & Guppies: Working together to prevent introductions of invasive species via the horticulture and aquarium trades. Fall 2005 UC Davis Biological Invasions IGERT conference. September, 2005.
- Veblen, K.E.** 2005. Glades as landscape features in an African rangeland savanna: vegetation dynamics and large herbivores. Presented at the 2005 Bay Area Conservation Symposium, Stanford, CA. January, 2005.

GRANTS and CONTRACTS

Total: \$2,923,940 (External: \$2,710,309)
 Total as lead PI: \$1,971,273 (External: \$1,911,639)

Pending: National Science Foundation, "LTREB Preliminary proposal: Collaborative Research: Cattle-wildlife effects on savanna stability and ecosystem function in the Kenya Long-term Exclosure Experiment (KLEE)", co-investigators: T.P. Young and C. Riginos.

2017 National Science Foundation, REU supplement (\$8,178 to T.P. Young, PI); (co-investigators E. Forbes, K.E. Veblen)

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- 2017-2021:** USDA-AFRI, “A pre-emptive rangeland restoration approach to improving biodiversity and provision of ecosystem services”, (\$500,000 total; **\$306,971** to Veblen, PI; Brunson, Baggio, and Pyke, co-PIs). **Recommended for funding**
- 2017-2018:** National Geographic Society, “Savanna synergies: complex interactions between fire and wild and domestic herbivores”, (\$24,400 to T.P. Young, PI; co-investigators: Veblen, Kimuyu, and Odadi)
- 2017-2018:** Private donation, “Rangeland restoration as a tool to enhance the recovery of hirola antelope in eastern Kenya”, (**\$69,500** to Veblen, PI) (co-investigator and primary fundraiser: Abdullahi Ali)
- 2016-2017:** Bureau of Land Management, “Restoration and monitoring of Antelope Pasture, southern ID”, (**\$40,000** to Veblen, PI) (co-investigators: J. Boettinger and T.A. Monaco)
- 2015-2016:** Utah Public Land Policy Coordinating Office (via UDWR), “Increasing Stakeholder Awareness and Appreciation of the Scientific Basis for Utah’s Greater Sage-grouse Conservation Strategy”, (\$93,562 to T. Messmer, PI); (**\$35,000** to Veblen, E. Thacker and T.A. Monaco, co-PIs).
- 2015-2017** Utah Division of Wildlife Resources, “Interactive effects of soils and browsing on sagebrush: implications for restoration success”; (**\$227,200** to Veblen, PI); (co-investigators K. Nehring, M. Duniway, J. Boettinger, E. Schupp, T. Monaco, E. Thacker, J. Villalba, C. Brungard)
- 2015-2017** Utah Division of Water Quality, “Water quality impacts of cattle grazing in Great Salt Lake Wetlands”; (\$39,093 total; **3,924** to Veblen, co-PI); (PI and co-investigator, K. Kettinger))
- 2015-2016** USDA Natural Resources Conservation Service, “GBCESU: Estimation of plant height using photogrammetrically derived point clouds”; (\$13,917 to D. Ramsey, PI); (co-investigators: K. Hulvey, E. Thacker, K.E. Veblen)
- 2015-2020** USDA-ARS Specific Cooperative Agreement, “Comprehensive assessment of seeded restoration species: factors controlling establishment and persistence”; (**\$41,000** to Veblen, PI)
- 2015-2017** Great Basin Native Plant Project, “Comprehensive assessment of rangeland seedings to improve restoration success”; (**\$30,526** to Veblen, PI); (co-investigator and lead author: T.A. Monaco; co-investigators E. Thacker, J. Vernon, D. Summers, K. Gunnell)
- 2015** National Park Service, “Monitoring aspen and tall shrubs for ungulate browsing at Fossil Butte National Monument”; (\$10,000 to P. Rogers, PI); (co-investigator K.E. Veblen)
- 2015-2017** Utah Agricultural Experiment Station, “Using grazing systems to manage ecosystem services in Utah and western landscapes”; (\$79,997 to K. Hulvey, P.I.); (co-investigators: E. Thacker, K.E. Veblen, M. Brunson)

- 2015-2016** USU Extension, “Using livestock grazing systems to manage ecosystem services in Utah rangelands”; (\$10,000 to K. Hulvey, P.I.); (co-investigators: E. Thacker, B. Burritt, D. Rothlisberger, K.E. Veblen, M. Brunson, D. Ramsey)
- 2015-2017** USU office of Research and Graduate Studies, “Integrating ecological, economic, and social components to improve effectiveness of landscape restoration”; (\$54,000 total; **\$18,000** to Veblen, co-PI); (co-investigators K. Kettenring, K. Mock, M. Brunson, E. Edwards, R. Whitesides)
- 2015-2016** South Davis Sewer District, “Impacts of grazing for *Phragmites* control on soil nitrogen and phosphorus in Great Salt Lake wetlands” (\$65,000 to K. Kettenring, PI); (co-investigators: K. E. Veblen, J.F. Shah)
- 2015** National Science Foundation, REU supplement (**\$9,398** to Veblen, PI); (co-investigators G.K. Charles, T.P. Young)
- 2015-2019** USGS-USFWS Science Support Partnership, “Perennial grass response to post-fire grazing management” (\$272,961 total; **\$97,789** to Veblen, PI); (co-investigators: B. Newingham, D. Pyke)
- 2014-2017:** Utah Division of Forestry, Fire & State Lands, “Effectiveness of grazing and herbicide as a *Phragmites* control and wetland restoration approach”; (\$94,720 total; **\$3,140** to Veblen); (PI and co-investigator: K. Kettenring)
- 2014** USU Extension Mini- Grant, “Assessment of Cattle Distribution in Rich County UT” (\$10,000 to E. Thacker, PI); (co-investigators: D. Rothlisberger, K.E. Veblen)
- 2014-2015** Utah Agricultural Experiment Station, “Competitive variation among bottlebrush squirreltail (*Elymus elymoides*) populations and identification of potential environmental drivers” (**\$19,994** to Veblen, PI); (co-investigators: R. Mann, T.A. Monaco)
- 2014-2015** Utah Watershed Restoration Initiative, “Expediting the comprehensive synthesis and assessment of Utah range trend studies and Watershed Restoration Initiative projects” (\$40,586 total; **\$37,959** to Veblen, PI); (co-investigator and lead author: T.A. Monaco’ co-investigators: E. Thacker, J. Johanson, K. Gunnell, J. Cox, D. Summers, J. Vernon)
- 2013-2014** Utah State University Research Catalyst Grants, “Long-term patterns and context-dependence of deer, elk and cattle effects on rangeland plant communities” (**\$19,994** to Veblen, PI)
- 2013-2018** National Science Foundation, “Renewal: Collaborative research: KLEE- scaling up and out at the Kenya Long-term Exclosure Experiment” (\$449,773 total; **\$145,235** to Veblen, PI); (co-investigators: T.P. Young [PI] and C. Riginos)
- 2012-2015** USDA Natural Resources Conservation Service (NRCS), Utah Conservation Innovation Grants (CIG), “An ecological site-based handbook and demonstration of brush management (CP 314) and range planting (CP 550) technology for Utah shrublands” (**\$74,785** to Veblen, PI); (co-investigators: B. Burritt, T.A. Monaco)
- 2012-2013** Utah Department of Agriculture and Food, “Consequences of livestock removal for plant communities across three ecological sites in southeastern Utah (Colorado Plateau)” (**\$20,900** to Veblen, PI); (co-investigator: T.J. Zelikova)

- 2011-2015** Great Basin Native Plant Selection and Increase Project, “Restoration of native understory plants in degraded sagebrush steppe ecosystems,” (\$135,500 total; **\$39,971** to Veblen, Lead author, co-PI); (co-investigators: D.A. Pyke, N. DeCrappeo, T. Wirth)
- 2011-2013** Utah State University Agricultural Experiment Station, “Restoration of native understory plants in degraded sagebrush steppe ecosystems,” (**\$16,325** to Veblen, PI in 2011; **\$3,326** in 2012); (co-investigators: D.A. Pyke, N. DeCrappeo, T. Wirth)
- 2008-2012** National Science Foundation, “KLEE- scaling up and out at the Kenya Long-term Exclosure Experiment” (\$449,800 to T.P. Young, PI) (co-investigators C. Riginos, K.E. Veblen, K. Caylor)

TRAVEL GRANTS

- 2017** Utah Agricultural Experiment Station, Travel Grant for 2017 SRM meeting, St. George, UT (\$500)
- 2016** Utah Agricultural Experiment Station, Travel Grant for 2016 SRM meeting, Corpus Christi, TX (\$500)
- 2016** USU Ecology Center, Travel Grant for 2016 SRM meeting, Corpus Christi, TX (\$500)
- 2014** USU Ecology Center, Travel Grant for 2014 ESA meeting, Sacramento, CA (\$500)
- 2014** Utah Agricultural Experiment Station, Travel Grant for 2014 ESA meeting, Sacramento, CA (\$500)
- 2013** USU Ecology Center, Travel Grant for 2013 ESA meeting, Minneapolis, MN (\$600)
- 2013** Utah Agricultural Experiment Station, Travel Grant for 2013 ESA meeting, Minneapolis, MN (\$500)
- 2013** USU Center for Women and Gender Travel Grant (\$500)
- 2012** Gardner Junior Faculty Travel Fellowship (\$2,000)
- 2012** USU Center for Women and Gender Travel Grant for 2012 ESA, Portland, OR (\$500)
- 2012** USU Ecology Center Travel Grant for 2012 ESA, Portland, OR (\$750)

FELLOWSHIPS, HONORS AND AWARDS RECEIVED

- 2016** Quinney College of Natural Resources graduation escort for valedictorian (selected by valedictorian)
- 2016** Quinney College of Natural Resources Undergraduate Research Mentor of the Year (\$500)
- 2015** Quinney College of Natural Resources Teacher of the Year (\$1,000)
- 2014** Quinney College of Natural Resources Commencement, Inspirational Speaker (selected by students)
- 2013** Department of Wildland Resources Outstanding Graduate Mentor
- 2009** Shapiro Family Award for most outstanding PhD graduate in Dept. of Plant Sciences, UC-Davis (\$1,000)
- 2003-2008** National Science Foundation Graduate Research Fellowship (\$124,000)
- 2003-2008** UC Davis Biological Invasions NSF-IGERT Fellowship (\$75,000)
- 2006** Science and Society/Career Discovery Group Fellowship, UC-Davis (\$3,600)
- 2002** UC Davis, Ecology Graduate Group Block Grant Fellowship (\$24,000)
- 1998** Jacob Van Ek Award (one of 20 awards given annually by College of Arts and Sciences in recognition of service and scholarship), CU-Boulder
- 1997** Phi Beta Kappa

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TEACHING

Classes taught:

WILD 4750: Monitoring and Assessment in Natural Resource and Environmental Management; 4 credits, Fall 2011, 2012, 2013, 2014, 2015; 2016 ~35 students per year

WILD 6700/WATS 6700: Restoration Ecology (team taught with Dr. Karin Kettenring); 4 credits, Spring 2012, 2014; ~11 students per year

Guest lectures:

Utah State University, Dept. of Wildland Resources, Natural Resources Professional Orientation class, Spring 2015, Fall 2015, Spring 2016, Fall 2016

Utah State University, Dept. of Wildland Resources, Assessment and synthesis in natural resource science class, Spring 2015, Spring 2017

Mpala Research Centre Outreach Discovery Day, 2013

Utah State University, Dept. of Watershed Sciences, Restoration Ecology class, Spring 2013

University of Nairobi students (at Mpala Research Centre, Kenya), 2011

Leeds University students (at Mpala Research Centre, Kenya), 2011

University of San Francisco, Conservation and Policy Masters Program, 2007

Princeton University students (at Mpala Research Centre, Kenya), 2006

Greenwood College students (at Mpala Research Centre, Kenya), 2006

MENTORING and ADVISING (USU unless noted otherwise)

Graduate student and post-doc advising:

Current

Merran Owen, MS, starting Fall 2017

Lacey Wilder, MS, [co-advisor], 2015 - present

Brittany Duncan, MS, [co-advisor], 2014 - present

Eric LaMalfa (USU Quinney Fellow), PhD, 2013 - present

Kyle Nehring, PhD, 2012 - present

Completed

Corinna Riginos, Post-doc, 2015-2016

Rebecca Mann, MS, 2013-2016: "Intraspecific variation in the response of *Elymus elymoides* to competition from *Bromus tectorum*"; currently employed by U.S. Geological Survey

Maike Holthuijzen (NSF Graduate Research Fellow), MS, 2012 - 2015: "Grass-shrub spatial associations over precipitation and grazing gradients in the Great Basin"; currently working on 2nd M.S. degree in statistics

Huiqin He, Post-doc [co-advisor], 2015; returned to university position in China

Lin Liu, Post-doc [co-advisor], 2013-2014; returned to university position in China

Graduate committee memberships:

Current

Jacqueline Pena (MS, 2017-present)

Liza Le Roux (PhD, 2016; external examiner, Nelson Mandela Metropolitan University)

Adam Fund (MS, 2016-present)

Ryan Choi (PhD, 2015-present)

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Andrew Sims (MS, 2015-present)
Chesson Colburn (MS, 2012-present)
Michel Kohl (PhD, 2012-present)
Christine Rohal (PhD, 2012-present)
Seth Dettenmeier (PhD, 2011-present)

Defended

Aimee Tallian (PhD, 2012-2016)
Hilary Whitcomb (PhD, 2011-2016)
Marcella Campione (PhD, 2011-2015)
Matt Van Scoyoc (MS, 2011-2014)

Undergraduate research mentoring:

Maggie Hallerud, Honors contract, 2016
Amberlee Burrows, Undergraduate research [co-advisor], 2016
Justin Taylor, Undergraduate research [co-advisor], 2015-present
Lacey Wilder, Undergraduate research [co-advisor], 2015
Sara Germain, Undergraduate research, 2014 – 2016
Trec Reed, Undergraduate research, 2014 – 2015
Brittany Johnson, Undergraduate research, 2014 – 2015
Jamie Reynolds, Honors contract, 2014
Trinity Smith, Honors contract, 2014
Hope Braithwaite, Undergraduate research [co-advisor], 2013-2015
Tim Bateman, Undergraduate research [co-advisor], 2013-2015
Brittany Duncan, Undergraduate research, 2013-2014
Kathryn Dawson, Senior thesis (U.C-Davis/U. East Anglia), 2004

Other Mentoring:

Society for Conservation Biology program targeting African women scientists (2008-2009)
Science and Society/Career Discovery Group for entering freshmen, UC-Davis (2006-2007)

Grants and Fellowships to advisees (Total = \$337,988):

Canyonlands Research Center Graduate Research Scholars Program research grant, Kyle Nehring, 2016 (\$2,000)
NSF Graduate Research Fellowship, Sara Germain, 2016 (\$126,000; funding was awarded to undergrad mentee and will be used for grad work outside my lab)
USU Dept. of Wildland Resources travel funds, Eric LaMalfa, 2016 (\$300)
USU Quinney College of Natural Resources travel funds, Eric LaMalfa, 2016 (\$300)
USU RGS Graduate student travel grant, Eric LaMalfa, 2016 (\$300)
USU Ecology Center travel grant, Eric LaMalfa, 2016 (\$600)
Utah Chapter of TWS grant, Hope Braithwaite and Tim Bateman, 2014 (\$500)
USU Ecology Center student research grant, Rebecca Mann, 2014 (\$1,500)
USU Ecology Center student research grant, Kyle Nehring, 2014 (\$2,500)
Garden Club of America Award in Desert Studies, Rebecca Mann, 2014 (\$4,000)
USU Summer Undergraduate Research and Creative Opportunities, Sara Germain, 2014 (\$1,250)
USU Ecology Center travel grant, Kyle Nehring, 2014 (\$1,125)
USU RGS Graduate student travel grant, Kyle Nehring, 2014 (\$600)
USU Center for Women and Gender travel grant, Kyle Nehring, 2014 (\$500)

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USU Dept. of Wildland Resources travel funds, Kyle Nehring, 2014 (\$600)
USU Dept. of Wildland Resources travel funds, Kyle Nehring, 2013 (\$300)
USU Ecology Center travel grant, Rebecca Mann, 2013 (\$313)
USU Dept. of Wildland Resources travel funds, Rebecca Mann, 2013 (\$300)
USU Undergraduate Research and Creative Opportunities, Hope Braithwaite, 2013 (\$500)
USU Undergraduate Research and Creative Opportunities, Brittany Duncan, 2013 (\$500)
USU Quinney Doctoral Fellowship, Eric LaMalfa, 2013 (\$60,000)
USU Ecology Center student research grant, Maïke Holthuijzen, 2013 (\$2,500)
USU Ecology Center student research grant, Kyle Nehring, 2013 (\$2,500)
USU Ecology Center student research grant, Maïke Holthuijzen, 2012 (\$3000)
NSF Graduate Research Fellowship, Maïke Holthuijzen, 2012 (\$126,000)

PROFESSIONAL MEMBERSHIPS

Ecological Society of America
Society for Range Management
Society for Ecological Restoration
Laikipia Wildlife Forum, Kenya

SERVICE

Service to the Profession:

Coordinating editor: *Restoration Ecology* 2015-present

Manuscript reviews, scientific journals

2016: *Restoration Ecology* (1), *Western North American Naturalist* (1), *Austral Ecology* (1)

2015: *Journal of Applied Ecology* (2), *Plos One* (1); *Rangeland Ecology & Management* (3); *Restoration Ecology* (1)

2014: *Ecosystems* (2), *Journal of Arid Environments* (1), *Journal of Tropical Ecology* (1), *Rangeland Ecology & Management* (1)

2013: *African Journal of Ecology* (1), *Botany* (1), *Ecology* (1), *Journal of Zoology* (2), *Land Degradation and Development* (1), *Restoration Ecology* (1)

2012: *Ecosphere* (1), *Journal of Applied Ecology* (1), *Land Degradation and Development* (2)

2011: *Biotropica* (1), *Ecology* (1), *Journal of Animal Ecology* (2), *Rangelands* (1)

2010: *Biotropica* (1), *Journal of Arid Environments* (2), *Journal of Ecology* (1), *Oecologia* (1), *Plant Ecology* (1),

2009: *Ecology* (1), *Ecology Letters* (1), *Journal of Applied Ecology* (1), *Journal of Ecology* (3)

2007: *Ecography* (1)

Manuscript pre-reviews, federal agencies

2015: USGS (1)

2013: USGS (2)

Manuscript reviews, book chapters

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2015: (1)

Proposal reviews

2015: National Science Foundation ad-hoc review (1); Utah Agricultural Experiment Station (1)

2014: Nevada Agricultural Experiment Station (1); Utah Agricultural Experiment Station (1)

2013: USDA-NIFA (1)

Panels

2014: National Science Foundation Division of Environmental Biology

Professional conference activities

2016-2017: Diversity committee sub-chair for 2017 Society for Range Management annual meeting planning committee

2012: Meeting mentor for the Rangeland Ecology section of the Ecological Society of America meeting; Judge for student competition at Society for Range Management Meeting

2011: Judge for student competitions at Ecological Society of America meeting

Campus Service:

2011- present Curriculum Committee, Dept. of Wildland Resources

2017 Search Committee for Population and Movement Ecologists, Dept. of Wildland Resources

2016 QCNR Awards Committee

2016 QCNR “Master teacher” for USU “Foundations of USU teaching” workshop for new faculty

2016 Search Committee for Research Associate, Ecology Center

2013-2014 Panelist for Undergraduate Research and Creative Opportunities grant program

2013-2014 Search Committee for Rangeland Ecologist, Dept. of Wildland Resources

2013 Search Committee for Forest Ecologist, Dept. of Wildland Resources

2012 Search Committee for Research Associate, Ecology Center

Outreach:

2012 - present Canyonlands Research Center Science Committee

2017 Search committee for Canyonlands Research Center field station manager

2016 Interviewed by Utah Public Radio for my paper on cattle-wildlife interactions in Kenya <http://upr.org/post/cows-imitate-zebras-and-other-grazers-african-savanna>

2016 Interviewed by Oregon Public Broadcasting for story on rangeland monitoring <http://www.opb.org/news/series/burns-oregon-standoff-bundy-militia-news-updates/data-gap-on-ecosystem-health-puts-ranchers-feds-at-odds/>

2015 Field tours for Brush Management Project, Cedar Fort, UT (May 2015), Bird’s Eye, UT (May 2015), Park Valley, UT (June 2015), Bear Lake, UT (June 2015) (organized and presented primarily by grad student, R. Mann)

2015 Presentation of *Phragmites* grazing project results, Phragmites Working Group Meeting in Salt Lake City, UT, March, 2015 (presented by grad student, B. Duncan)

2014 Field tour presentation for Beef Basin sagebrush restoration project, Utah Society for Range Management Summer Range Tour, Summer 2014 (presented by grad student, K. Nehring)

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2013 Participation in Canyonlands Research Center Ecosystem Management Workshop
2012 Provision of study design advice to the Swaner Ecocenter for a goat grazing project
2012 Provision of recommendations for land treatments, Monticello, UT BLM district
2012 Presentation on restoration and livestock-wildlife interactions at annual USGS co-op
 meeting

[Also see *Outreach publications*]