

**2014**  
**Faculty Achievements and Activities**  
**S.J. & Jessie E. Quinney College of Natural Resources**

**Awards and Honors**

**Aubry, Lise Myriam**

Associate Editor, British Ecological Society, (October 1, 2014).

Center for Woman & Gender Award, Center for Woman & Gender USU, (March 2014).

**Beard, Karen H**

Editor's Choice of December 2014, Biological Conservation, (December 3, 2014).

Editor's Choice of December 2014, Oikos, (December 3, 2014).

**Brain, Roslynn G**

Community Engaged Scholar, Utah Campus Compact, (August 2014).

**Brunson, Mark William**

Graduate Research Mentor of the Year, College of Natural Resources, (March 22, 2014).

**Coppock, David Layne**

EXCEL Award (Gold) for Top Feature Article in a Journal for 2013, Association Media and Publishing, Tyson's Corner, Virginia, (May 19, 2014).

**Endter-Wada, Joanna Lynne**

Award of Excellence, Western Extension Directors Association, (July 2014).

**Frazer, Nat**

39th Annual Last Lecture Honoree, USU Honors Program, (2014).

**Gaeta, Jereme**

Editor's Choice Award, Canadian Journal of Fisheries and Aquatic Sciences, (February 11, 2014).

**Howe, Peter David**

Fellow, Enabling the Next Generation of Hazards & Disasters Researchers Fellowship Program, National Science Foundation, (December 2014).

**Kulmatiski, Andrew**

2014 article "Most soil trophic guilds increase plant growth" selected as an Editor's Choice manuscript, Oikos, (December 2014).

**Macnulty, Daniel Robert**

Quinney College of Natural Resources Teacher of the Year, Quinney College of Natural Resources,  
(March 2014).

**Messmer, Terry A**

Meritorious Service Medal, US ARMY, (June 2014).

**Mock, Karen E**

Quinney College of Natural Resources Researcher of the Year, Quinney College of Natural Resources,  
(March 2014).

**Romesburg, H Charles**

Golden Circle Society Member, Best Friends Animal Society, (February 2014).

**Schmidt, Robert H**

Certificate of Appreciation, University of Hawaii Sea Grant College Program's Hanauma Bay Education  
Program, (July 28, 2014).

President's Volunteer Service Award, President's Council on Service and Civic Participation, (July 28,  
2014).

Recipient of Service-Learning Mini-Grant, Center for Civic Engagement & Service-Learning, (February  
14, 2014).

Named Distinguished Associate Professor of Honors Education, USU Office of the Provost, (January 8,  
2014).

**Van Miegroet, Helga**

Outstanding Oral Presentation Award, Forest, Range and Wildland Soils Division at the Soil Science  
Society of America Annual Meeting, (November 2014).

Women in Agronomy, Crops, Soils and Environmental Sciences Mentoring Award, Soil Science Society  
of America, Crop Science Society of America; Agronomy Society of America, (November 2014).

**Villalba, Juan J**

Division Editor, Journal of Animal Science – American Society of Animal Science

## **Publications/Intellectual Contributions**

**Adler, Peter B**

Anthropogenic-based regional-scale factors most consistently explain plot-level exotic diversity in  
grasslands, (2014), *Global Ecology and Biogeography*, 23, 802-810.

Anticipating changes in variability of grassland production due to increases in interannual precipitation  
variability, (2014), *Ecosphere*, 5, art58.

Herbivores and nutrients control grassland plant diversity via light limitation, (2014), *Nature*, 508,  
517-520.

Causal networks clarify productivity-richness interrelations, bivariate plots do not, (2014), *Functional Ecology*, 28, 787-798.

Conflicting management objectives on the Colorado Plateau: Understanding the effects of bison and cattle grazing on plant community composition, (2014), *Journal of Nature Conservation*, 22, 293-301.

Eutrophication weakens stabilizing effects of diversity in natural grasslands, (2014), *Nature*, 508, 521-525.

Finding generality in ecology: A model for globally distributed experiments, (2014), *Methods in Ecology and Evolution*, 5, 65-73.

Functional traits explain variation in plant life history strategies, (2014), *Proceedings of the National Academy of the USA*, 111, 740-745.

Life form influences survivorship patterns for 109 herbaceous perennials from six semi-arid ecosystems, (2014), *Journal of Vegetation Science*, 25, 947-954.

Warming, competition, and *Bromus tectorum* population growth across an elevation gradient, (2014), *Ecosphere*, 5, 121.

Warming, soil moisture, and loss of snow increase *Bromus tectorum*'s population growth rate, (2014), *Elementa: Science of the Anthropocene*, 2, 000020.

When should plant population models include age structure?, (2014), *Journal of Ecology*, 102, 531-543.

### **Aubry, Lise Myriam**

Is anthropogenic cougar mortality compensated by changes in natural mortality in Utah? Insight from long-term studies, (February 2015), *Biological Conservation*, 182, 187-196.

Winter space use of coyotes in high-elevation environments: behavioral adaptations to deep-snow landscapes, (October (4th Quarter/Autumn) 27, 2014), *Journal of Ethology*, 32, 29-41.

Methods for studying cause-specific senescence in the wild, (August 28, 2014), *methods in ecology and evolution*.

Effects of exploitation on a native invasive species: the lesser snow goose dilemma, (February 19, 2014), *Journal of Animal Ecology*, 83, 365-374.

### **Beard, Karen H**

Diet of the non-native Greenhouse Frog (*Eleutherodactylus planirostris*) in Maui, Hawaii, (April (2nd Quarter/Spring) 2015), *Journal of Herpetology*, 49.

Activated carbon decreases invasive plant growth by mediating plant-microbe, (January (1st Quarter/Winter) 2015), *AoB Plants*, 7, plu072.

Introduction effort, climate matching, and species traits as predictors of global establishment success in non-native reptiles, (January (1st Quarter/Winter) 2015), *Diversity and Distributions*, 21, 64-74.

Predicting Risk of Invasive Species Occurrence: Plot Based, (2014), USGS/NPS joint publication.

The Process of Model Assessment and Evaluation, (2014).

Citizen science reveals widespread negative effects of roads on amphibian distributions, (December 1, 2014), *Biological Conservation*, 180, 31–38.

A social-ecological systems approach to non-native species: Habituation and its impact on management of coqui frogs in Hawaii, (December 1, 2014), *Biological Conservation*, 180, 187–195.

Most soil trophic guilds increase plant growth: a meta-analytical review, (November 2014), *Oikos*, 123, 1409-1419.

*Invasion Ecology* Second Edition, J.L. Lockwood, M.F. Hoopes, and M.P. Marchetti, Wiley-Blackwell (2013). 466 pp. Paperback, Price US\$ 57.99, ISBN: 978-1444333657, (January (1st Quarter/Winter) 2014), *Biological Conservation*, 169, 157.

### **Belmont, Patrick**

Identifying sediment sources and sinks in the Root River, Southeastern Minnesota, (2014), *Annals of the Association of American Geographers*, 104, 20–39.

River basin organization around the main stem: Scale invariance in tributary branching and the incremental area function, (2014), *Journal of Geophysical Research: Earth Surface*, 119, 2174–2193.

TerEx Toolbox for semi-automated selection of fluvial terrace and floodplain features from lidar, (2014), *Earth Surface Processes and Landforms*, 39, 569–580.

Toward generalizable sediment fingerprinting with tracers that are conservative and nonconservative over sediment routing timescales, (2014), *Journal of Soils and Sediments*, 14, 1479–1492.

TerEx Toolbox for semi-automated selection of terrace and floodplain features from lidar., (January (1st Quarter/Winter) 2014), *Earth Surface Processes and Landforms*.

### **Brain, Roslynn G**

Developing, implementing, and evaluating a No-Child-Left-Inside pilot program, (December 2014), *Applied Environmental Education and Communication*, 13, 261-268.

Sustainable You! Summer Camp: 4-H Aggie Adventures for Kids, (2014).

Backyard beekeeping, (August 2014).

Extension sustainability outreach: Rising to meet public sustainability demand, (May 2014), *Rural Connections: A publication of the Western Rural Development Center*.

Practicing environmental etiquette in Utah's Deserts, (February 2014).

Why do cattle ranchers participate in conservation easement agreements? Key motivators in decision making., (January (1st Quarter/Winter) 15, 2014), *Acroecology and Sustainable Food Systems*, 38, 299-316.

### **Brunson, Mark William**

A social-ecological systems approach to non-native species: Habituation and its impact on management of coqui frogs in Hawaii, (December 1, 2014), *Biological Conservation*, 180, 187–195.

Go-back land: restoring abandoned farmland and sustaining farm towns, (October (4th Quarter/Autumn) 21, 2014), National Socio-Environmental Synthesis Center.

A synopsis of short-term response to alternative restoration treatments in sagebrush steppe: the SageSTEP project, (September 30, 2014), Rangeland Ecology & Management, 67.

Multi-disciplinary, multi-site evaluation of alternative sagebrush steppe restoration treatments: The SageSTEP project, (September 30, 2014), Rangeland Ecology & Management, 67.

Acceptance, Acceptability, and Trust for Sagebrush Restoration Options in the Great Basin: A Longitudinal Perspective, (September 30, 2014), Rangeland Ecology & Management.

Improving public support for restoration plans: A matter of trust, (May 12, 2014), SageSTEP News, 1-3.

Unwanted no more: land use, ecosystem services, and opportunities for resilience in human-influenced shrublands, (April (2nd Quarter/Spring) 2014), Rangelands, 36, 5-11.

Successes and Challenges from Formation to Implementation of Eleven Broad-Extent Conservation Programs, (April (2nd Quarter/Spring) 2014), Conservation Biology, 28, 302-314.

#### **Burritt, Elizabeth A**

BEHAVE Newsletter December 2014, (December 1, 2014), Utah State University Extension, 2014, 1-3.

BEHAVE Newsletter November 2014, (November 1, 2014), Utah State University Extension, 2014, 1-3.

Aspen (*Populus tremuloides* Michx.) Intake and Preference by Mammalian Herbivores: The Role of Plant Secondary Compounds and Nutritional Context, (October (4th Quarter/Autumn) 5, 2014), Journal of Chemical Ecology.

BEHAVE Newsletter October 2014, (October (4th Quarter/Autumn) 1, 2014), Utah State University Extension, 2014, 1-2.

BEHAVE Newsletter August 2014, (August 31, 2014), Utah State University Extension, 2014, 1-2.

Feedlot Performance and Profitability of Cattle Fed Either a Mixed Ration or Allowed to Select Their Diet, (June 30, 2014), University of Wyoming, 1, 71-72.

Benefits of exposing animals to poor-quality foods early in life, (June 2014), Utah State University, 1-3.

Should Ranchers Value Sagebrush? Why We Need Sagebrush, (May 2014), Utah State University Extension, 1-4.

Nutritional Value and Toxins in Various Noxious Weeds, (May 15, 2014), Utah State University, 1, 1-15.

#### **Conner, Mary M**

Comparison of tributary survival estimates of Steelhead using Cormac–Jolly–Seber and Barker models: Implications for sampling efforts and designs, (2014), Transactions of American Fisheries Society, 143, 320–333.

Life-history characteristics of mule deer: Effects of nutrition in a variable environment, (2014), Wildlife Monographs, 186, 1-62.

Using sterilization to change predation rates of wild coyotes: A test case involving pronghorn fawns, (2014), *Applied Animal Behaviour Science*, 154, 83-92.

**Conover, Michael R**

Diet and body mass of ducks in the presence of commercial harvest of brine shrimp cycyts in the Great Salt Lake, (2014), *Journal of Wildlife Management*, 78, 1197-1205.

Do artificial nests stimulate nest success of great sage-grouse?, (2014), *Human-Wildlife Interactions*, 7, 299-312.

Factors influencing mortality of eared grebes during a mass downing, (2014), *Wilson Journal of Ornithology*, 126, 584-591.

Greater sage-grouse (*Centrocercus urophasianus*) select habitat based on avian predators, landscape composition, and anthropogenic features, (2014), *Condor: Ornithological Applications*.

Greater sage-grouse hen survival: effects of raptors, anthropogenic and landscape features, and hen behavior, (2014), *Condor*, 116, 629-642.

Impacts of weather and accidents on wildlife, (2014), *The Wildlife Society and John Hopkins University Press*, 144-145.

Population fluctuations and distribution of staging eared grebes in North America, (2014), *Canadian Journal of Zoology*, 91, 906-913.

Role of benthic substrate in waterfowl distribution on Great Salt Lake, (2014), *Waterbirds*, 37, 298-306.

**Coppock, David Layne**

Adapting small-farm systems to climate change: Preliminary results from participatory community assessments in Bajura District, Nepal. Research Brief 17-2014, *Feed the Future--Adapting Livestock Systems to Climate Change*, (June 2014).

Can Brush-Clearing, Deferred Grazing, or Camels Help Mitigate Climate-Change Effects for Borana Pastoralists? An Economic Analysis of Potential Interventions, (June 2014), *RB-19-2014*.

Preliminary Results from Participatory Rural Appraisals (PRAs) and Follow-Up Investigations held at Four Pastoral Associations on the North-Central Borana Plateau, Ethiopia, (June 2014).

Sustainable Pastoralism in Ethiopia: Preliminary Results from participatory community assessments on the north central Borana plateau. Research Brief 16-2014, *Feed the Future--Adapting Livestock Systems for Climate Change*, Colorado State University, (June 2014).

**Cramer, Patricia C**

Transportation and Large Herbivores, (April (2nd Quarter/Spring) 2015), John Wiley & Sons, Ltd.

Modifying structures to enhance passage by wildlife on existing roads, (March 2015), John Hopkins University Press.

Wildlife Crossing Structures in Utah: Determining the Best Designs, (November 2014), Utah Division of Wildlife Resources.

Vehicle Collisions Cause Differential Age and Sex-specific Mortality in Mule Deer, (November 2014), *Advances in Ecology*, 10.

Methodology for Prioritizing Appropriate Mitigation Actions to Reduce Wildlife--Vehicle Collisions on Idaho Highways, (August 2014), Idaho Transportation Department.

Monitoring wildlife-vehicle collision in the information age: how smartphones can improve data collection, (June 2014), PLOS, 9.

### **Du Toit, Johan Truter**

Generalities in grazing and browsing ecology: using across-guild comparisons to control contingencies, (April (2nd Quarter/Spring) 1, 2014), *Oecologia*, 174, 1075-83.

Interactions between megaherbivores and microherbivores: elephant browsing reduces host plant quality for caterpillars, (January (1st Quarter/Winter) 2014), *Ecosphere*, 5.

Elephant-mediated ecosystem processes in Kalahari-sand woodlands, (January (1st Quarter/Winter) 2014), Wiley-Blackwell, 30-39.

Elephants and heterogeneity in savanna landscapes, (January (1st Quarter/Winter) 2014), Wiley-Blackwell, 289-298.

Elephants and Savanna Woodland Ecosystems, (January (1st Quarter/Winter) 2014), Wiley-Blackwell.

Impala as controllers of elephant-driven change within a savanna ecosystem., (January (1st Quarter/Winter) 2014), Wiley-Blackwell, 154-171.

The Chobe elephants: one species, two niches., (January (1st Quarter/Winter) 2014), Wiley-Blackwell, 104-117.

### **Endter-Wada, Joanna Lynne**

iSAW: Integrating Structure, Actors, and Water to Study Socio-Hydro-Ecological Systems, (March 2015), *Earth's Future/AGU*.

Tools for Evaluating and Monitoring Effectiveness of Urban Landscape Water Conservation Interventions and Programs, (March 2015), *Landscape and Urban Planning*, 139, 82-93.

Adaptive wetland management in an uncertain and changing arid environment, (2014), *Ecology and Society*, 19, 23.

Clean Water Scarcity (1950s-present), (October (4th Quarter/Autumn) 2014).

Justice and immigrant Latino recreation geography in Cache Valley, Utah, (April (2nd Quarter/Spring) 2014), *Journal of Leisure Research*, 46, 291-312.

### **Frey, Shandra Nicole**

Greater Sage-Grouse (*Centrocercus urophasianus*) hen survival: effects of raptors, anthropogenic and landscape features, and hen behavior, (2014), *Canadian Journal of Zoology*, 92, 319-331.

Greater sage-grouse (*Centrocercus urophasianus*) select habitat based on avian predators, landscape composition, and anthropogenic features, (2014), *Condor: Ornithological Applications*.

The Effect of Coterie Relocation on the Survival and Behavior of Utah Prairie Dogs, (July (3rd Quarter/Summer) 2014), *The Journal of Wildlife Management*, 78, 1069-1077.

The Uninvited Guest, (November 2014), *Crossroads in Science*, 2, 43-50.

High-school students win with wildlife education., (May 7, 2014), *Iron County Today*.

High-school students win with wildlife education., (May 7, 2014), *The Communicator*, 10, 4.

Wildlife fun in the winter, (January (1st Quarter/Winter) 28, 2014), *Iron County Today*.

### **Gaeta, Jereme**

Drought-driven lake level decline: effects on coarse woody habitat and fishes, (2014), *Canadian Journal of Fisheries and Aquatic Sciences*, 71, 1–11.

### **Gese, Eric M**

Balancing scat deposition and fecal DNA degradation rates to optimize concurrent noninvasive genetic sampling of intraguild predator and prey species. *Gordon Research Conferences: Predator-Prey Interactions*, Ventura, California.

Camera trapping vs radio-telemetry: a comparison of noninvasive and invasive methods for monitoring cougar populations. 11th Mountain Lion Workshop, Cedar City, Utah.

Compensation and additivity in cougar mortality: learning from heavily and lightly harvested populations. 11th Mountain Lion Workshop, Cedar City, Utah.

Does habitat heterogeneity in a multi-use landscape influence survival rates and density of a native mesocarnivore? *PLoS ONE* 9(6): e100500.

Evaluation of harvest indices currently used for cougar management in Utah: Oquirrh-Stansbury and Monroe units as case studies. 11th Mountain Lion Workshop, Cedar City, Utah.

Finding a fox: an evaluation of survey methods to estimate abundance of a small desert carnivore. *PLoS ONE* 9(8): e105873.

Foraging patterns of cougars in the Pryor Mountains of Wyoming and Montana. 11th Mountain Lion Workshop, Cedar City, Utah.

Influence of habitat structure and food on patch choice of captive coyotes. *Applied Animal Behaviour Science* 157:127-136.

Predation-specific resource selection by cougars in the Pryor Mountains of Wyoming and Montana. 11th Mountain Lion Workshop, Cedar City, Utah.

Species interactions and competition among carnivores. Upper Tanana Cooperative Management and Research meeting, Tok, Alaska.

Using sterilization to change predation rates of wild coyotes: a test case involving pronghorn fawns. *Applied Animal Behaviour Science* 154:83-92.

Winter space use of coyotes in high-elevation environments: behavioral adaptations to deep-snow landscapes. *Journal of Ethology* 32(1):29-41.

### **Hawkins, Charles P**

Non-equilibrium in plant distribution models - only an issue for introduced or dispersal limited species?, (2014), 37.



Predicting thermal vulnerability of stream and river ecosystems to climate change, (August 1, 2014), 125, 399-412.

Enhancing the performance and interpretation of freshwater biological indices: An application in arid zone streams, (January (1st Quarter/Winter) 2014), ECOLOGICAL INDICATORS, 36, 470-482.

#### **Howe, Peter David**

Mapping the shadow of experience of extreme weather events, (November 2014), Climatic Change, 127, 381–389.

Perceptions of seasonal climate and climate change in Norway: evidence for motivated reasoning, (November 6, 2014), Norwegian Citizen Panel Conference.

Public perceptions of rainfall change in India, (October (4th Quarter/Autumn) 2014), Climatic Change.

Geographic Variation in U.S. Climate Change Opinion at State and Local Scales, (October (4th Quarter/Autumn) 27, 2014), Social Science Research Network.

Extreme weather and climate change in the American mind: November, 2013, (January (1st Quarter/Winter) 2014), Yale University.

#### **Hulvey, Kristin**

Co-benefits of planting species mixes in carbon projects, (2014), Ecological Management & Restoration, 15, 26–29.

Managing the whole landscape: historical, hybrid, and novel ecosystems, (2014), Frontiers in Ecology and the Environment, 12, 577–564.

Using filter-based community assembly models to improve restoration outcomes, (2014), Journal of Applied Ecology, 51, 997–1005.

#### **Jenkins, Michael J**

Models to predict the moisture content of lodgepole pine foliage during the red stage of mountain pine beetle attack, (April (2nd Quarter/Spring) 2014), Forest Science.

Spruce Beetle Biology, Ecology and Management in the Rocky Mountains: an addendum to Spruce Beetle in the Rockies, (January (1st Quarter/Winter) 2014), Forests, Volume 5, 5(1), 21-71.

Crown fire potential in recently attacked mountain pine beetle-infested lodgepole pine stands, (January (1st Quarter/Winter) 2014), Forestry, 0, 1-15.

Spruce bark beetle-induced changes to Engelmann spruce crown flammability, (January (1st Quarter/Winter) 2014), Forest Science.

Interactions among the Mountain Pine Beetle, Fires, and Fuels, (January (1st Quarter/Winter) 2014), Forest Science.

#### **Jin, Jiming**

Improvements in WRF simulations of southeastern United States summer rainfall: Physical parameterization and horizontal resolution, (October (4th Quarter/Autumn) 1, 2014), Springer, 43, 2077-2091.

Contribution of the North Atlantic Subtropical High to Regional Climate Model (RCM) skill in simulating Southeastern United States summer precipitation, (October (4th Quarter/Autumn) 1, 2014).

Significant impacts of radiation physics in the Weather Research and Forecasting model on the precipitation and dynamics of the West African Monsoon, (August 26, 2014), Climate Dynamics.

Predicting thermal vulnerability of stream and river ecosystems to climate change, (August 1, 2014), 125, 399-412.

Weather Research and Forecasting model simulations of a rare springtime bow echo near the Great Salt Lake, (May 9, 2014), Meteorological Applications (RMS).

### **Kettenring, Karin Marie**

Multiple signatures of an invasive species in the geologic record, (2014), Anthropocene, 5, 59-64.

Non-equilibrium in plant distribution models - only an issue for introduced or dispersal limited species?, (2014), 37.

Phragmites Control at the Urban/Rural Interface, (2014), USU Extension.

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Application of genetic diversity-ecosystem function research to ecological restoration, (2014), Journal of Applied Ecology, 51, 339-348.

Phragmites australis management in the United States: 40 years of methods and outcomes, (2014), AoB Plants, 6, plu001.

Use of remote sensing to assess changes in wetland plant communities over an 18-year period – a case study from the Bear River Migratory Bird Refuge, Great Salt Lake, UT, (January (1st Quarter/Winter) 2014), Western North American Naturalist, 74, 33-46.

### **Koons, David N**

Drivers of waterfowl population dynamics: from teal to swans, (2014), Wildfowl, Special Issue 4, 169-191.

Legacy effects of habitat degradation by Lesser Snow Geese on nesting Savannah Sparrows, (2014), The Condor: Ornithological Applications, 116, 527-537.

Lesser Scaup (*Aythya affinis*), (2014), The Birds of North America Online. Ithaca: Cornell Lab of Ornithology; <http://bna.birds.cornell.edu/bna/species/338> doi:10.2173/bna.338.

Previous success and current body condition determine breeding propensity in Lesser Scaup: evidence for the individual heterogeneity hypothesis, (2014), The Auk: Ornithological Advances, 131, 287-297.

Methods for studying cause-specific senescence in the wild, (2014), Methods in Ecology and Evolution 5, 924-933.

Effects of exploitation on an overabundant species: the lesser snow goose predicament, (2014), *Journal of Animal Ecology*, 83, 365-374.

**Kuhns, Michael R**

Learn at Lunch Forestry Webinars, (December 31, 2014).

My Arboretum Website, (December 31, 2014).

USU Extension Forestry Facebook and Twitter, (December 31, 2014).

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USU Tree Browser Website, (December 31, 2014).

Utah Forest News, (December 31, 2014), *USU Extension*, 17, 8 pp.

Urban forestry changes in the western U.S., (December 1, 2014), *The International Forestry Review*, 16, 31.

Key to the Trees of Logan Canyon, (August 1, 2014), *USU Extension*, 13 pp.

Drip Irrigation for Trees, (June 1, 2014), *Christmas Trees*, 41.

USU Tree Browser App for iPhone, (March 1, 2014).

Key to the Trees of Logan Canyon Website, (February 3, 2014).

**Kulmatiski, Andrew**

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Most soil trophic guilds increase plant growth: a meta-analytical review, (November 2014), *Oikos*, 123, 1409-1419.

Soil water retention curves for the major soil types of the Kruger National Park, (November 10, 2014), *Koedoe*, 56.

Soil organism effects on grassland production and diversity. In: *Grasslands: Habitat Management, Impact of Plant Diversity and Conservation Strategies* (Editors: Mariotte P and Kardol P), NOVA Publisher, New York.

Towards a better integration of biogeochemical and ecological data from precipitation manipulation experiments into land surface models, (September 2014), *Reviews of Geophysics*, 52.

**Lant, Christopher Louis**

Geographic Determinants of Rural Land Cover and the Agricultural Margin in the Central United States, (2014), *Applied Geography*, 138-154.

**Long, James N**

A comprehensive framework of forest stand property-density relationships: perspectives for plant population ecology and forest management, (December 15, 2014), *Annals of Forest Science*, 71, 326-335.

Resistance and resilience: a conceptual framework for silviculture, (December 5, 2014), *Forest Science*, 60, 1205-1212.

Vegetation geo-climatic zonation in the Rocky Mountains, northern Utah, USA, (April (2nd Quarter/Spring) 2014), *Journal of Mountain Science*, 11, 656-673.

### **Luecke, Chris**

The response of lakes near the arctic LTER to environmental change, (March 10, 2014), Oxford University Press.

Understanding how lake populations of arctic char are structured, (January (1st Quarter/Winter) 20, 2014), *Oecologia*, 176, 81-94.

### **Lutz, James A**

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Comparative evolutionary diversity and phylogenetic structure across multiple forest dynamics plots: a mega-phylogeny approach, (November 2014), *Frontiers in Genetics*, 5, 1-14.

Assessing fire-mediated change to forest spatial structure using a fusion of Landsat and airborne LiDAR data in Yosemite National Park, (September 2014), *Remote Sensing of Environment*, 151, 89-101.

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Spatially non-random tree mortality and ingrowth maintain equilibrium pattern in an old-growth Pseudotsuga-Tsuga forest, (August 2014), *Ecology*, 95, 2047-2054.

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### **Macnulty, Daniel Robert**

Wolves on the hunt: the behavior of wolves hunting wild prey, (May 15, 2015), University of Chicago Press.

Influence of group size on the success of wolves hunting bison, (November 14, 2014), *PLoS ONE*, 9(11): e112884.

In defense of fences, (July (3rd Quarter/Summer) 25, 2014), *Science*, 345, 389.

Density-dependent intraspecific aggression regulates survival in northern Yellowstone wolves (*Canis lupus*), (May 21, 2014), *Journal of Animal Ecology*, 83, 1344-1356.

**Mesner, Nancy O**

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Improving Utah's Water Quality. Strawberry River Watershed., (September 2014).

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Improving Utah's Water Quality. Little Bear River Watershed., (June 2014).

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**Messmer, Terry A**

Effects of climatic variation and reproductive trade-offs vary by measure of reproductive effort in greater sage-grouse, (December 2014), *Ecosphere*, 5, 154.

Sage-grouse Habitat in Utah: A Guide, (October (4th Quarter/Autumn) 2014), Utah State University Extension.

Greater Sage-Grouse Juvenile Survival in Utah, (June 2014), *Journal of Wildlife Management*, 78, 808-817.

**Mock, Karen E**

Imaging spectroscopy links aspen genotype with belowground processes at landscape scales, (April (2nd Quarter/Spring) 2014), *Philosophical Transactions of the Royal Society of London B*, 369.

Genotyping-by-sequencing for *Populus* population genomics: an assessment of genome sampling patterns and filtering approaches, (March 2014), *PLoS ONE*, 9, e95292.

Aspen seedling establishment and growth following wildfire and during drought in central Arizona: an instructive case history, (January (1st Quarter/Winter) 31, 2014), *Forest Science*.

Modeling freshwater mussel distribution in relation to biotic and abiotic habitat variables at multiple spatial scales. *Canadian Journal of Fisheries and Aquatic Sciences* 71: 1483-1497

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**Monz, Christopher A**

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Is tourism damaging ecosystems in the Andes? Current knowledge and an agenda for future research, (September 2014), *Ambio*, 1-17.

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An Assessment of Winter Use in the Moose Wilson Road Corridor of Grand Teton National Park, (July (3rd Quarter/Summer) 2014).

**Null, Sarah Elizabeth**

iSAW: Integrating Structure, Actors, and Water to Study Socio-Hydro-Ecological Systems, (March 2015), Earth's Future/AGU.

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Optimizing the dammed: Water supply losses and fish habitat gains from dam removal systems analysis in California, (2014), Journal of Environmental Management, 136, 121-131.

More than meets the eye – managing salinity in Great Salt Lake, Utah, (October (4th Quarter/Autumn) 2014), Lakeline Magazine, Fall 2014, 25-29.

**Radel, Claudia A**

The legacy of Mexico's agrarian counter-reforms: Reinforcing social hierarchies in Calakmul, Campeche, (January (1st Quarter/Winter) 2015), Journal of Agrarian Change.

Developing, implementing, and evaluating a No-Child-Left-Inside pilot program, (December 2014), Applied Environmental Education and Communication, 13, 261-268.

Labour migration and gendered agricultural asset shifts in southeastern Mexico: Two stories of farming wives and daughters, (October (4th Quarter/Autumn) 2014), Springer.

Conditional cash transfers in Calakmul, Mexico: Impacts on gendered resource access and control, labor migration, and smallholder farming, (August 2014), CGIAR-CIAT.

Teaching and learning guide for: Extending a geographic lens towards climate justice, (April (2nd Quarter/Spring) 2014), Geography Compass, 8, 277-285.

Justice and immigrant Latino recreation geography in Cache Valley, Utah, (April (2nd Quarter/Spring) 2014), Journal of Leisure Research, 46, 291-312.

**Ramsey, Robert Douglas**

Exploring Succession Within Aspen Communities Using a Habitat-Based Modeling Approach, (September 24, 2014), Ecological Modelling, 288, 203-212.

Assessment of sagebrush cover using remote sensing at multiple spatial and temporal scales, (August 2014), Ecological Indicators, 43.

**Romesburg, H Charles**

Exercises for Bringing the Hypothetico-Deductive Method to Life, (May 2014), American Biology Teacher.

**Schmidt, Robert H**

Utah hunters must know a coyote from a wolf, (January (1st Quarter/Winter) 11, 2015), Salt Lake Tribune, 289, O5.

Ebola not your biggest threat, (November 11, 2014), Herald Journal, 104, A9.

Emphasis on health, wellness?, (October (4th Quarter/Autumn) 14, 2014), The Herald Journal, 104, A9-A10.

Watch for violators during misguided crow hunt, (September 7, 2014), Salt Lake Tribune, 288, O4.

'Easy' steps to wellness, (September 16, 2014), The Herald Journal, 104, A9.

Clear dialogue: Tell the truth, expect the truth when working with a health care provider, (July (3rd Quarter/Summer) 22, 2014), The Herald Journal, 104, A9.

Perceived damage and areas of needed research for wildlife pests of California agriculture, (June 2014), Integrative Zoology, 9, 265-279.

Develop a healthy commute, (June 24, 2014), Herald Journal newspaper, 104, C1.

Create A Plan And Follow It, (January (1st Quarter/Winter) 7, 2014), The Herald Journal, 104, A7.

### **Schupp, Eugene W**

Reproductive ecology of the endangered Utah endemic *Hesperidanthus suffrutescens* with implications for conservation, (October (4th Quarter/Autumn) 2014), The American Midland Naturalist, 172, 236-251.

A synopsis of short-term response to alternative restoration treatments in sagebrush steppe: the SageSTEP project, (September 30, 2014), Rangeland Ecology & Management, 67.

Region-wide ecological responses of arid Wyoming big sagebrush communities to fuel treatments, (September 2014), Rangeland Ecology and Management, 67, 455-467.

Resilience and resistance of sagebrush ecosystems: Implications for state and transition models and management treatments, (September 2014), Rangeland Ecology and Management, 67, 440-454.

Soil resources influence vegetation and response to fire and fire-surrogate treatments in sagebrush-steppe ecosystems, (September 2014), Rangeland Ecology and Management, 67, 506-521.

Simultaneous, independent, and additive effects of shrub facilitation and understory competition on the survival of a native forb (*Penstemon palmeri*), (April (2nd Quarter/Spring) 2014), Plant Ecology, 215, 417-426.

Effects of perennial semi-arid bunchgrass spatial patterns on performance of the invasive annual cheatgrass (*Bromus tectorum* L.), (February 2014), Plant Ecology, 215, 247-251.

### **Tainter, Joseph A**

Collapse and Sustainability: Rome, the Maya, and the Modern World, (2014), Archeological Papers of the American Anthropological Association, 201-214.

Complexity, Problem-Solving, Sustainability and Resilience., (2014), Building Research & Information, 42, 168-181.

May 7, (2014), 145.

Tropical Landscapes and the Ancient Maya: Diversity in Time and Space., (2014), Archeological Papers of the American Anthropological Association, 11-29.

**Thacker, Eric T**

Development and characterization of 23 microsatellite loci for scaled quail, (December 2014), Conservation Genetics Resources.

Sage-Grouse Habitat Monitoring: Daubenmire versus Line-Point Intercept, (2014), Society for Range Management

Synthesis of the effect of fire on lesser prairie-chickens, (2014), Great Plains Fire Science Exchange.

Should Ranchers Value Sagebrush? Why We Need Sagebrush, (May 2014), Utah State University Extension, 1-4.

**Van Miegroet, Helga**

Monitoring effects of PJ harvest and utilization, Final Report to USFS, (December 2014).

Aspen soil - The dynamic world below the surface, (November 2014), Tremblings, 5, 2-3.

Forest overstory effect on soil organic carbon storage – a meta-analysis, (July (3rd Quarter/Summer) 2014), Soil Science Society of America Journal, 78, S35-S47.

Predicting Tree Species Origin of Soil Organic Carbon with Near-Infrared Reflectance Spectroscopy, (July (3rd Quarter/Summer) 2014), Soil Science Society of America Journal, 78, S23-S34.

Vegetation geo-climatic zonation in the Rocky Mountains, northern Utah, USA, (April (2nd Quarter/Spring) 2014), Journal of Mountain Science, 11, 656-673.

Soil Organic Carbon Storage and Stability in the Aspen-Conifer Ecotone in Montane Forests in Utah., (February 2014), Forests, 5, 666-688.

**Veblen, Kari**

Monitoring effects of PJ harvest and utilization, Final Report to USFS, (December 2014).

Native and domestic browsers and grazers reduce fuels, firetemperatures, and acacia ant mortality in an African savanna, (June 2014), ECOLOGICAL APPLICATIONS, 24, 741-749.

Utah Shrubland Management Newsletter Volume 3, (January (1st Quarter/Winter) 2014).

Monitoring of livestock grazing effects on Bureau of Land Management land, (January (1st Quarter/Winter) 2014), Rangeland Ecology and Management, 67, 68-77.

**Villalba, Juan J**

Modelling preference and diet selection patterns by grazing ruminants, (February 2015), Animal Production Science.

Understanding and manipulating diet choice in grazing animals, (February 2015), Animal Production Science.

Integrating nutrition and animal welfare in extensive systems, (December 30, 2014), FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS.



Preference by sheep for endophyte-infected tall fescue grown adjacent to or at a distance from alfalfa, (October (4th Quarter/Autumn) 22, 2014), *Animal*.

Aspen (*Populus tremuloides* Michx.) Intake and Preference by Mammalian Herbivores: The Role of Plant Secondary Compounds and Nutritional Context, (October (4th Quarter/Autumn) 5, 2014), *Journal of Chemical Ecology*.

Reduced neophobia: a potential mechanism explaining the emergence of self-meditative behavior in sheep, (August 14, 2014), *Physiology & Behavior*, 135, 189-197.

Importance of grass-legume choices on cattle grazing behavior, performance and meat characteristics, (March 2014), *Journal of Animal Science*, 92, 2309-2324.

Influence of dietary flavours on sheep feeding behaviour and nutrient digestibility, (March 7, 2014), *Animal Production Science*.

Influence of drinking water with quebracho tannin on intake of endophyte-infected tall fescue by cattle, (February 1, 2014), *Animal Feed Science and Technology*, 188, 13-16.

Veterinary Medicine: Balancing Consumer and Ecological Health?, (January (1st Quarter/Winter) 2014), *Springer*, 3, 165-190.

Influence of Experience on Browsing Sagebrush by Cattle and its Impacts on Plant Community Structure, (January (1st Quarter/Winter) 2014), *Rangeland Ecology & Management*, 67, 78-87.

Effects of supplementing endophyte-infected tall fescue with sainfoin and polyethylene glycol on the physiology and ingestive behavior of sheep, (January (1st Quarter/Winter) 14, 2014), *Journal of Animal Science*, 92, 744-757.

Ruminant self-medication against gastrointestinal nematodes: evidence, mechanism, and origins, (January (1st Quarter/Winter) 14, 2014), *Parasite*, 21, 31-41.

### **Wurtsbaugh, Wayne A**

The Great Salt Lake's monimolimnion and its importance for mercury bioaccumulation in brine shrimp (*Artemia franciscana*), (January (1st Quarter/Winter) 2014), *Limnology and Oceanography*, 59, 141-155.

## **Contracts, Grants and Sponsored Research**

### **Adler, Peter B**

Collaborative Research: Integral Projection Models for Populations in Varying Environments: Construction and Analysis, Funded, (2014 - 2017).

Forecasting climate change impacts on rangeland plant communities: Selecting, validating and scaling-up population models, Funded, \$80,000.00, (2012 - 2017).

CAREER: Forecasting the community impacts of climate change—When do species interactions matters?, Funded, \$710,000.00, (2011 - 2016).

Ecohydrological models to predict climate change impacts on rangeland plant species, Funded, \$20,000.00, (2012 - 2014).

Forecasting the ecological impacts of climate change: New methods to monitor plant demography at landscape scales, Funded, \$20,000.00, (2012 - 2014).

A systems approach to seedling establishment on degraded rangeland: Managing ecological processes driving recruitment bottlenecks, Funded, \$500,000.00, (2011 - 2014).

**Aubry, Lise Myriam**

USU PhD Presidential Fellowship, Funded, \$52,000.00, (September 1, 2013 - August 31, 2017).

Black bear population dynamics, Funded, \$28,000.00, (July 1, 2013 - August 31, 2017).

Ecological drivers of persistence in a hibernator, Funded, \$2,000.00, (January 1, 2015 - December 31, 2015).

Adaptive responses of Uinta Ground Squirrels to climate change: learning from a hibernating indicator species, Funded, \$19,995.00, (March 2014 - March 2015).

Adaptive responses to climate change in our backyard: Drivers of life history variation in the Uinta Ground Squirrel, Funded, \$20,000.00, (July 2013 - June 2014).

Cougar Management in Utah, Funded, \$19,734.00, (July 1, 2013 - May 31, 2014).

**Beard, Karen H**

Asynchrony in the timing of goose-vegetation interactions: implications for biogeochemical cycling in wet sediment tundra, Funded, \$1,500,000.00, (2014 - 2017).

How do matrix-habitat types influence edge effects? Ecological perspectives of local farmer and applied field study on bromeligenous and leaf-litter frogs at Brazilian Atlantic Rainforest, Funded, \$9,200.00, (November 15, 2013 - November 14, 2015).

Do coqui frogs affect bird communities in Hawaii?, Funded, \$50,000.00, (October 2013 - September 2014).

**Belmont, Patrick**

Climate and Human Dynamics as Amplifiers of Natural Change: A Framework for Vulnerability Assessment and Mitigation Planning., Funded, \$4,372,127.00, (September 1, 2012 - August 30, 2017).

Exploiting high-resolution topography for advancing the understanding of mass and energy transfer across landscapes: Opportunities, challenges, and needs, Funded, \$100,000.00, (July 1, 2014 - June 30, 2016).

Understanding the effects of wildfire on fish populations and stream geomorphology in Twitchell Canyon, Utah, Funded, \$383,589.00, (July 1, 2013 - June 30, 2016).

USU RGS MERCCI: Modeling Ecosystem Response to Climate Change, Funded, (2014 - 2015).

Collaborative Implementation Strategy for Sediment Reduction for the Greater Blue Earth River Basin, Funded, \$770,000.00, (September 1, 2012 - August 30, 2015).

OSL dating of terraces in Hells Canyon, Funded, \$7,254.00, (August 1, 2014 - April 30, 2015).

Measuring long-term erosion rates near Hells Canyon, Idaho, Funded, \$22,000.00, (September 1, 2013 - April 30, 2015).

An integrated sediment budget for the Root River, southeastern Minnesota, Funded, \$227,658.00, (May 1, 2012 - April 30, 2015).

### **Brain, Roslynn G**

Utah farm-chef-fork: furthering farm to restaurant communication, Funded, \$35,081.00, (October 2014 - October 2016).

Campus electric vehicle charging station, Funded, \$689,000.00, (November 2014 - December 2015).

Cache High Community Garden: Collaborative Community-Based Horticulture and Sustainable Living Education, Funded, \$9,775.20, (April 2014 - June 2015).

Moab Area Sustainable Teaching Gardens Intern, Funded, \$5,000.00, (April 2014 - June 2015).

USU Extension Permaculture Initiative, Funded, \$10,000.00, (April 2014 - June 2015).

Blue Goes Green house solar panels, Funded, \$4,000.00, (January 1, 2014 - December 31, 2014).

Farm-Chef-Fork, Funded, \$29,096.00, (2012 - 2014).

True Blue Reuse Sale Infrastructure, Funded, \$1,740.00, (January 1, 2014 - December 13, 2014).

CO2-based geothermal feasibility study, Funded, \$5,000.00, (June 2014 - November 2014).

Farm-Chef-Fork: Establishing enhanced farm to restaurant communication and sourcing across Utah, Funded, \$29,096.00, (October 2012 - October 2014).

USU Extension Sustainability Social Media Intern, Funded, \$4,000.00, (March 2014 - September 2014).

Initiation of a "Plant Start" Program for Migrant Head Start in Providence, Funded, \$346.00, (February 2014 - August 2014).

Renewable energy in extension: Message framing and communication with extension clientele, Funded, \$2,642.00, (April 2013 - April 2014).

Life literacy: Education for a sustainable future, Funded, \$10,000.00, (April 2013 - January 2014).

### **Brunson, Mark William**

Tribal Consultation Meeting and Science Communication Assistance, Funded, \$12,574.00, (July 1, 2013 - December 31, 2016).

Preparation of Natural Resource Condition Assessment Reports for Five Intermountain Region Parks, Funded, \$61,065.00, (September 15, 2013 - December 31, 2015).

Development of Outreach and Interpretive Materials to Communicate Best Management Practices for Confronting Marijuana Growers in National Parks, Funded, \$4,000.00, (June 15, 2013 - December 31, 2015).

Translational Ecology - A Pedagogical Framework to Integrate Natural and Social Science, Funded, (September 2013 - August 2015).

Weather Data and Forecasting Applications for Management of Ecologic Site Transitions, Funded, \$437,099.00, (February 1, 2013 - January 31, 2015).

Science Communication Assistance for Devil's Postpile National Monument, Funded, \$9,927.00, (September 15, 2013 - December 31, 2014).

Science Communication Assistance for Yosemite National Park, Funded, \$4,000.00, (July 30, 2012 - December 31, 2014).

Contemporary Tribes of Capitol Reef National Park, Funded, \$13,500.00, (May 15, 2012 - December 31, 2014).

Preparation of Natural Resource Condition Assessment Reports for Bent's Old Fort, Fort Davis, and Fort Larned National Historic Sites, Funded, \$42,463.00, (September 1, 2012 - September 30, 2014).

Climate Driven Invasive Grass-Fire Cycles: Understanding Ecosystem Responses for Effective Pre- and Post-fire Management of Great Basin and Mojave Rangelands, Funded, \$419,973.00, (September 1, 2010 - August 31, 2014).

A Systems Approach to Seedling Establishment on Degraded Rangeland: Managing Ecological Processes Driving Recruitment Bottlenecks, Funded, \$499,034.00, (March 1, 2012 - July 31, 2014).

Public Opinions on Fur-Bearers (especially Beaver), Funded, \$10,184.00, (September 30, 2013 - June 30, 2014).

Develop Outreach and Interpretive Materials to Communicate Best Management Practices for Confronting Illegal Marijuana Cultivation, Funded, \$11,000.00, (September 1, 2012 - February 28, 2014).

#### **Burr, Steven W**

Visitor Use Study-Pleasant Grove Ranger District, Uinta-Wasatch-Cache National Forest, Funded, \$58,581.00, (November 21, 2015 - January 31, 2016).

Understanding Hispanic/Latino(a) Outdoor Recreation Behavior on the Salt Lake Ranger District of the Uinta-Wasatch-Cache National Forest in the Central Wasatch Mountains, Funded, \$12,317.00, (June 4, 2014 - June 3, 2015).

2014-2015 Visitor Use Study for the Salt Lake Ranger District, Uinta-Wasatch-Cache National Forest, Funded, \$61,917.00, (February 17, 2014 - May 31, 2015).

#### **Burritt, Elizabeth A**

Using New Knowledge on grazing behavior to control medusahead in the western US, Funded, \$416,000.00, (October 2011 - September 2015).

An ecological site-based handbook and demonstration of brush management (CP 314) and range planting (CP 550) technology for Utah shrublands, Funded, \$74,785.00, (September 1, 2012 - August 31, 2015).

Rangeland Stewardship and Health CoP Optimization Plan 2014, Funded, \$50,000.00, (January 1, 2014 - December 31, 2014).

Influence of the Feeding Context to Reduce Aspen Utilization by Herbivores, Funded, \$15,000.00, (July 2013 - September 2014).

Does Secondary Chemistry Influence Sheep Preferences for Aspen?, Funded, \$10,000.00, (June 1, 2013 - June 30, 2014).

**Conover, Michael R**

Impact of common ravens on greater sage-grouse nests in southern Wyoming during 2012-2013., Funded, \$35,000.00, (2014 - 2017).

Impact of predator removal on greater sage-grouse populations, Funded, \$125,817.00, (2014 - 2016).

Impact of coyote removal on mule deer in Nevada, Funded, \$625,000.00, (2011 - 2016).

Food web linkages and avian habitat use of the Great Salt Lake, Funded, \$44,700.00, (2014 - 2015).

Impact of common ravens on greater sage-grouse nests in southern Wyoming during 2012-2013., Funded, \$37,000.00, (2012 - 2015).

Impact of ravens on sage-grouse, Funded, \$37,000.00, (2011 - 2015).

Food web linkages among birds on the Great Salt Lake, Funded, \$47,240.00, (2013 - 2014).

Impact of raven and fox predation on nesting sage-grouse, Funded, \$30,000.00, (2013 - 2014).

Impact of ravens on sage-grouse nests in southern Wyoming, Funded, \$70,000.00, (2013 - 2014).

Tropic mismatches between nesting and migrating birds using the Great Salt Lake and its food pulses, Funded, \$20,000.00, (2012 - 2014).

**Coppock, David Layne**

Using New Knowledge on grazing behavior to control medusahead in the western US, Funded, \$416,000.00, (October 2011 - September 2015).

Climate and livestock in Nepal, Funded, \$450,000.00, (July 1, 2012 - June 30, 2015).

Risk Management and Utah Ranching, Funded, \$310,690.00, (July 1, 2010 - June 30, 2015).

Improving the Resilience of Mixed Farm Systems to Pending Climate Change in Far Western Nepal, Funded, \$449,987.00, (May 1, 2012 - April 30, 2015).

Sustainable Livestock Production on the Borana Plateau, Funded, \$500,000.00, (October 1, 2012 - April 19, 2015).

Support for a Special Issue of Rangelands Magazine: "Women as Change Agents in the World's Rangelands", Funded, \$16,400.00, (June 2013 - May 2014).

**Du Toit, Johan Truter**

Improved monitoring for management of the Henry Mountains bison herd, Funded, \$330,286.00, (2011 - 2014).

**Endter-Wada, Joanna Lynne**

Utah EPSCoR RII Track-1: Interactions Among Water, Energy, and the, Funded, \$20,000,000.00, (August 1, 2012 - July 30, 2017).

Testing Experimental Irrigation System Intervention in the Salt Lake City Department of Public Utilities Service Area, Funded, \$9,926.40, (June 1, 2014 - May 30, 2015).

**Frey, Shandra Nicole**

Hamlin Valley Greater Sage-grouse Population Monitoring Continuation, Funded, \$80,000.00, (July 1, 2013 - July 30, 2016).

Effects of Construction Activities and Reclamation on Sage-grouse Movements and Habitat Use, Funded, \$181,921.00, (July 1, 2013 - June 30, 2016).

Protect Visitor Experience, Health and Historic Structures via Wildlife Exclusion at Bryce Canyon, Funded, \$78,108.00, (July 1, 2013 - June 30, 2016).

Southern Utah Sage-grouse Monitoring. Year 2, Funded, \$159,291.00, (October 1, 2014 - September 30, 2015).

•Protecting visitor experience, health, and historic structures via wildlife exclusion of Bryce Canyon National Park. Year 2., Funded, \$24,020.00, (October 1, 2014 - September 30, 2015).

Comparison of Methods to Control Pocket Gophers in Alfalfa. Year 2, Funded, \$5,143.00, (July 2014 - June 2015).

•Evaluating the Effectiveness of the Color Country Natural Resource Camp, Funded, \$9,966.04, (July 1, 2014 - June 30, 2015).

Comparison of Methods to Control Pocket Gophers in Alfalfa, Funded, \$6,743.00, (July 1, 2013 - June 30, 2014).

Damage Management of Ringtails in Southern Utah, Funded, \$9,266.00, (July 1, 2013 - June 30, 2014).

Wildlife Research Education Network Intern, Funded, \$5,000.00, (July 1, 2013 - June 30, 2014).

**Gese, Eric M**

Pronghorn productivity and monitoring. Idaho Department of Fish and Game (\$138,476)

Characterization of cortisol levels in various sample types collected from southern Beaufort Sea polar bears. U.S. Geological Survey, Alaska Science Center (\$18,198)

**Hawkins, Charles P**

System for Mapping And Predicting Species Of Concern (SMAP-SOC), Funded, \$199,000.00, (January 2014 - December 2014).

**Howe, Peter David**

Testing a high-frequency survey tool to model risk perceptions and disaster preparedness, Funded, \$6,700.00, (January 1, 2015 - December 31, 2015).

Modeling the Geographic Response of U.S. Agriculture to Climate Change, Funded, \$18,000.00, (2014 - 2015).

**Jenkins, Michael J**

Fuels Treatments to Reduce Environmental and Human Impacts of Large Fires at Camp Williams, Utah., Funded, \$120,000.00, (April 2013 - March 2015).

Monitoring the Impact of Climate Change on the Frequency and Severity of Fires in Great Basin Bristlecone Pine Sky Island Ecosystems, Funded, \$24,000.00, (December 2013 - November 2014).

The Influence of Fuel Moisture and Flammable Monoterpenes on the Combustibility of Conifer Fuels, Funded, \$423,529.00, (September 2011 - August 2014).

Monitoring the impact of climate on the disturbance regime of Great Basin bristlecone pine in sky island ecosystems, Funded, \$36,000.00, (May 2013 - April 2014).

### **Jin, Jiming**

Advances in lake-effect process prediction within NOAA's Climate Forecast System for North America, Funded, \$219,000.00, (August 1, 2014 - July 31, 2016).

System for Mapping And Predicting Species Of Concern (SMAP-SOC), Funded, \$199,000.00, (January 2014 - December 2014).

### **Kettenring, Karin Marie**

Restoration of diverse and invasion resistant native vegetation in Great Salt Lake wetlands, Funded, \$19,972.00, (2014 - 2016).

Effectiveness of grazing and herbicide as a Phragmites control and wetland restoration approach, Funded, \$30,000.00, (2014 - 2015).

Revegetation of native wetland plants to improve Phragmites management in the Great Salt Lake watershed, Funded, \$35,194.00, (2014 - 2015).

The importance of plant genetic diversity to ecosystem multi-functionality in ecological restoration, Funded, \$19,986.00, (2014 - 2015).

Treatments for effective restoration of Phragmites-dominated wetlands in the Great Salt Lake, Funded, \$10,000.00, (2014 - 2015).

Assessing approaches to manage Phragmites in the Great Salt Lake watershed, Funded, \$36,000.00, (2012 - 2015).

Assessing approaches to manage Phragmites in Utah wetlands, Funded, \$30,000.00, (2012 - 2015).

RUI-Collaborative Proposal: Reduction in riverine silica transport due to human-induced change in riparian vegetation, Funded, \$21,746.00, (2012 - 2015).

The effects of water management on wetland condition, Funded, \$133,668.00, (2012 - 2015).

Assessing approaches to manage Phragmites in Utah wetlands, Funded, \$28,000.00, (2011 - 2015).

Mapping wetland vegetation in the Great Salt Lake Ecosystem, Funded, \$67,414.00, (2012 - 2014).

Mapping wetland vegetation in the Great Salt Lake ecosystem, Funded, \$40,531.00, (2012 - 2014).

Improving control of Phragmites and restoring native wetland vegetation in Great Salt Lake wetlands, Funded, \$50,000.00, (July 1, 2011 - December 31, 2014).

Predicting impacts of stressors at the land water interface, Funded, \$253,005.00, (2009 - 2014).

Assessing approaches to manage Phragmites in Utah wetlands, Funded, \$10,000.00, (November 29, 2012 - June 30, 2014).

Assessing approaches to manage Phragmites in the Great Salt Lake, Funded, \$110,845.00, (August 1, 2011 - June 30, 2014).

**Koons, David N**

The Hudson Bay Project, Funded, \$125,000.00, (2012 - 2015).

The Hudson Bay Project, Funded, \$125,000.00, (2011 - 2015).

Improved monitoring for management of the Henry Mountains bison herd, Funded, \$330,286.00, (2011 - 2014).

**Kuhns, Michael R**

Managing for resilience in forested ecosystems of the Intermountain West: a model for training future researchers and managers, Funded, \$236,000.00, (2011 - 2015).

Sustainability Website & Certification Training Series Development, Funded, \$9,800.00, (November 1, 2013 - November 1, 2014).

Restoring the West Conference 2014 Support, Funded, \$5,245.00, (July 2, 2014 - October 31, 2014).

Support for Creation of a Virtual Arboretum, Funded, \$20,000.00, (July 1, 2011 - June 30, 2014).

Restore Community Ecosystems While Promoting Green Jobs in the Puget Sound Area, Funded, \$1,300,000.00, (March 13, 2009 - March 13, 2014).

USDA-FS, Region 4, Participating Agreement - Aspen Expertise, Funded, \$10,000.00, (March 1, 2013 - February 28, 2014).

**Kulmatiski, Andrew**

Quantifying plant-soil feedback effects in classic diversity-productivity experiments, Funded, \$500,000.00, (May 1, 2014 - May 31, 2018).

Ecohydrological models to predict climate change impacts on rangeland plant species, Funded, \$20,000.00, (2012 - 2014).

**Lant, Christopher Louis**

MOU to maintain headquarters of Universities Council on Water Resources at SIUC, Funded, \$1,226,712.00, (2014 - 2018).

Modeling the Geographic Response of U.S. Agriculture to Climate Change, Funded, \$18,000.00, (2014 - 2015).

Climate Change, Hydrology, and Landscapes of America's Heartland: A Multi-scale natural-human system, Funded, \$1,430,000.00, (2010 - 2014).

MOU to maintain headquarters of Universities Council on Water Resources at SIUC, Funded, \$1,584,000.00, (2009 - 2014).



**Larese-Casanova, Mark**

Development of the Utah Master Naturalist Field Book Apps, Funded, \$4,000.00, (July 1, 2014 - June 30, 2015).

Extension Undergraduate Internship Award, Funded, \$4,000.00, (July 1, 2014 - June 30, 2015).

Statewide Dissemination of the Utah Junior Naturalist Program, Funded, \$10,000.00, (July 1, 2014 - June 30, 2015).

Sustainability Website & Certification Training Series Development, Funded, \$9,800.00, (November 1, 2013 - November 1, 2014).

Development and Piloting of the Utah Junior Naturalist Program, Funded, \$17,500.00, (July 1, 2012 - June 30, 2014).

**Long, James N**

FIA Increment Core Archiving, Funded, \$50,028.00, (July 16, 2012 - December 31, 2016).

Managing for resilience in forested ecosystems of the Intermountain West: a model for training future researchers and managers, Funded, \$236,000.00, (2011 - 2015).

Composition and structure of limber and whitebark pine stands in the Interior West and the silvicultural implications, Funded, \$15,000.00, (October 2013 - September 2015).

Ecosystem and Integrated Resource Management at Camp Williams, UT, Funded, \$477,357.11, (July 1, 2013 - December 31, 2014).

**Luecke, Chris**

US Forest Service Summer Interns, Funded, \$67,345.00, (May 2014 - December 2019).

**Macnulty, Daniel Robert**

Elk Sightability at Yellowstone NP, Funded, \$100,000.00, (September 15, 2014 - June 30, 2018).

Determinants of population growth in Utah moose, Funded, \$50,400.00, (January 20, 2013 - June 30, 2017).

Yellowstone Wolves: their ecology and community consequences, Funded, \$450,000.00, (September 1, 2012 - June 30, 2017).

Predicting the population consequences of environmental change, Funded, \$550,000.00, (February 1, 2012 - February 1, 2015).

BBC equipment contribution, Funded, \$7,769.50, (May 1, 2014 - August 1, 2014).

**Mesner, Nancy O**

FY 2013 USU Extension Nonpoint Source Reduction Proposal for 319 Funding, Funded, \$97,000.00, (July 21, 2013 - July 1, 2018).

Utah EPSCoR RII Track-1: Interactions Among Water, Energy, and the, Funded, \$20,000,000.00, (August 1, 2012 - July 30, 2017).

FY 2014 USU Extension NPS Outreach project, Funded, \$84,525.00, (June 2, 2014 - June 30, 2017).

FY 12 USU Extension Statewide Nonpoint Source Pollution Education and Citizen Monitoring Program. FY 2012., Funded, \$102,500.00, (July 1, 2012 - June 30, 2016).

FY 11 USU Extension Statewide Nonpoint Source Pollution Education and Citizen Monitoring Program. FY 2011., Funded, \$102,500.00, (July 2011 - June 2014).

**Messmer, Terry A**

Enhancing Greater Sage-grouse Conservation on BLM Land, Funded, \$250,000.00, (April 2014 - April 2019).

Mapping the Ecology of Greater Sage-grouse in Morgan and Summit Counties, Funded, \$136,125.00, (August 2014 - June 2017).

Greater Sage-Grouse Response to Season-Long and Prescribed Grazing (NRCS Conservation Practice 528) on Paired Ecological Sites (Phase 1), Funded, \$385,821.00, (August 1, 2011 - June 30, 2017).

Quantifying impacts of long-term sagebrush and juniper control., Funded, \$10,000.00, (March 2014 - May 2016).

Implementing Utah's Greater Sage-grouse Conservation Strategy, Funded, \$80,000.00, (October 2014 - June 2015).

Sage-grouse Initiative - Grazing and Sage-grouse, Funded, \$65,423.00, (July 2014 - June 2015).

Validation of Winter Models and Disurbance, Funded, \$36,627.00, (October 2014 - June 2015).

Greater Sage-grouse Response to Conifer Removal, Funded, \$65,000.00, (July 2014 - June 2015).

Utah Communiity-Based Cponervation, Funded, \$82,500.00, (October 2013 - June 2014).

Research Publications, Funded, \$30,000.00, (October 2013 - June 2014).

Sage-grouse Ecology in West Box Elder County, Funded, \$107,000.00, (June 2013 - June 2014).

Sage-grouse Response to Livestock Graziing, Funded, \$66,000.00, (July 2013 - May 2014).

**Mock, Karen E**

Ecological genetics of dominant plant species of the Intermountain West: Joint Venture Agreement, Funded, \$39,876.00, (May 2014 - June 2019).

Estimation of *Eriogonum corymbosum* var. *nilesii*. Range, Funded, \$80,000.00, (August 2012 - July 2017).

New Directions in Aspen Restoration for the Intermountain West., Funded, \$195,683.00, (July 2014 - June 2017).

Genetic Analysis of Utah Bears, Funded, \$201,322.00, (January 2011 - December 2016).

Managing for resilience in forested ecosystems of the Intermountain West: a model for training future researchers and managers, Funded, \$236,000.00, (2011 - 2015).

Adaptive capacity of mountain pine beetle in a changing climate, Funded, \$145,640.00, (September 2009 - September 2015).

System for Mapping And Predicting Species Of Concern (SMAP-SOC), Funded, \$199,000.00, (January 2014 - December 2014).

Latitudinal variance in aspen (*Populus tremuloides*) transcriptomes, Funded, \$115,700.00, (September 2009 - September 2014).

### **Monz, Christopher A**

Moose-Wilson Road Visitor Movement Study, Funded, \$383,345.00, (May 2013 - June 2016).

Managing Sustainable Recreation/Tourism in the Northern Forest, Funded, \$96,522.00, (November 2012 - June 30, 2015).

Understanding Hispanic/Latino(a) Outdoor Recreation Behavior on the Salt Lake Ranger District of the Uinta-Wasatch-Cache National Forest in the Central Wasatch Mountains, Funded, \$12,317.00, (June 4, 2014 - June 3, 2015).

Monitoring and Management of Arctic and Alpine Protected Areas in Norway, Funded, \$16,000.00, (January 1, 2014 - July 1, 2014).

Alternative transportation planning study at Colorado Front Range high visitation sites in the Arapaho-Roosevelt National Forest (ARNF), Funded, \$460,000.00, (March 2012 - June 2014).

Colorado State-wide Wilderness Assessment, Funded, \$86,000.00, (2008 - May 30, 2014).

### **Null, Sarah Elizabeth**

Assessment of Stormwater Harvesting via Managed Aquifer Recharge to Develop New Water Supplies in the Arid West: the Salt Lake Valley Example, Funded, \$749,998.00, (October 2015 - September 2018).

Utah EPSCoR RII Track-1: Interactions Among Water, Energy, and the, Funded, \$20,000,000.00, (August 1, 2012 - July 30, 2017).

Evaluating and developing a habitat based model for trout that includes temperature, flow, and food production, Funded, \$4,849,934.00, (2013 - 2016).

Swaner Preserve Instream Flow Study, Funded, \$15,271.00, (2014 - 2015).

USU RGS MERCCI: Modeling Ecosystem Response to Climate Change, Funded, (2014 - 2015).

WaterSMART: Building decadal prediction of extreme climate for managing water supply in Intermountain West, Funded, \$294,990.00, (September 1, 2013 - August 31, 2015).

Climate variability impacts for Utah's Great Salt Lake with proposed causeway modifications, Funded, \$50,927.00, (July 1, 2014 - June 30, 2015).

How do changes to the causeway in Utah's Great Salt Lake affect water and salt flow in Gilbert and Gunnison Bays, Funded, \$56,849.00, (July 1, 2013 - July 1, 2014).

### **Radel, Claudia A**

REU Supplement, Funded, \$7,504.00, (June 25, 2014 - July 31, 2016).

CAREER: Gendered Transnational Labor Migration, Agriculture, and Environmental Change in Mesoamerica, Funded, \$464,494.00, (August 15, 2011 - July 31, 2016).

Using cash transfers to promote ecosystem services and sustainable livelihoods: What is the role of conditionality?, Funded, \$17,669.80, (January 1, 2015 - December 31, 2015).

Conference Travel, Funded, (January 2014).

**Ramsey, Robert Douglas**

State View Program Development and Operations for the State of Utah, Funded, \$23,673.00, (December 13, 2013 - June 30, 2018).

Computation of National Forest Carbon Budgets, Funded, \$571,701.43, (October 13, 2010 - September 30, 2015).

Baseline Disturbance Mapping of Sage Grouse Management Areas in Utah, Funded, \$58,471.00, (December 1, 2013 - May 1, 2014).

Predictive Modeling of Bromus Tectorum in the West Desert Region of Utah, Funded, \$23,912.00, (February 1, 2011 - January 31, 2014).

**Schupp, Eugene W**

Conservation of a candidate species: breeding system and seed pool dynamics of the endemic DeBeque Phacelia (Phacelia submutica), Funded, \$50,000.00, (July 1, 2011 - December 31, 2015).

Sclerocactus wetlandicus habitat characterization and seed germination, Funded, \$98,999.00, (May 1, 2013 - April 30, 2015).

Ongoing funding for SageSTEP regional experiment, Funded, \$510,823.00, (June 7, 2011 - April 2015).

Evaluate Habitat Quality of Mexican Spotted Owl Territories in Utah, Funded, \$125,508.00, (November 1, 2010 - June 30, 2014).

**Thacker, Eric T**

Quantifying impacts of long-term sagebrush and juniper control., Funded, \$10,000.00, (March 2014 - May 2016).

Quantifying impacts of long-term sagebrush and juniper control., Funded, \$4,000.00, (July 2014 - October 2015).

Expediting the Comprehensive Synthesis and Assessment of Utah Range Trend Studies and Watershed Restoration Initiative Projects, Funded, \$40,586.00, (May 2014 - June 2015).

Assessment of Cattle Distribution in Rich County UT, Funded, \$10,000.00, (June 2014 - May 2015).

Assessment of cattle distribution in Rich County, Funded, \$10,000.00, (April 2014 - May 2015).

**Van Miegroet, Helga**

Improving feasibility of pinyon-juniper utilization for energy feedstock and ecological restoration, Funded, \$30,000.00, (2011 - 2015).

Using New Knowledge on grazing behavior to control medusahead in the western US, Funded, \$416,000.00, (October 2011 - September 2015).

Soils as the basis for assessment of site condition and ecosystem health, Funded, \$154,000.00, (2011 - 2014).

Analysis of mountain pine beetle effects on ecosystem processes in Lodgepole pine, Funded, \$63,415.00, (2008 - 2014).

### **Veblen, Kari**

LTREB Renewal: KLEE- scaling up and scaling out at the Kenya Long-term Exclosure Experiment in Laikipia rangeland, Funded, \$449,817.00, (August 1, 2013 - July 31, 2018).

REU supplement to LTREB, Funded, \$9,398.00, (March 2015 - February 2016).

Effectiveness of grazing and herbicide as a Phragmites control and wetland restoration approach, Funded, \$30,000.00, (2014 - 2015).

Improving feasibility of pinyon-juniper utilization for energy feedstock and ecological restoration, Funded, \$30,000.00, (2011 - 2015).

Competitive variation among bottlebrush squirreltail (*Elymus elymoides*) populations and identification of potential environmental drivers., Funded, \$19,989.00, (June 1, 2014 - November 30, 2015).

An ecological site-based handbook and demonstration of brush management (CP 314) and range planting (CP 550) technology for Utah shrublands, Funded, \$74,785.00, (September 1, 2012 - August 31, 2015).

Expediting the Comprehensive Synthesis and Assessment of Utah Range Trend Studies and Watershed Restoration Initiative Projects, Funded, \$40,586.00, (May 2014 - June 2015).

Assessment of Cattle Distribution in Rich County UT, Funded, \$10,000.00, (June 2014 - May 2015).

Assessment of cattle distribution in Rich County, Funded, \$10,000.00, (April 2014 - May 2015).

Restoration of native understory plants in degraded sagebrush steppe ecosystems, Funded, \$135,500.00, (February 1, 2013 - September 30, 2014).

Long-term patterns and context-dependence of deer, elk and cattle effects on rangeland plant communities, Funded, \$19,994.00, (July 1, 2013 - June 30, 2014).

### **Villalba, Juan J**

Self-Medication in Herbivores: A Novel Approach for Increasing the Ecological Services of Pasturelands and for Restoring Rangelands, Funded, \$665,544.20, (July 1, 2012 - June 30, 2017).

Manipulating early experience in ruminants to increase intake of forages of low palatability, Funded, \$350,000.00, (May 1, 2013 - January 1, 2016).

Using New Knowledge on grazing behavior to control medusahead in the western US, Funded, \$416,000.00, (October 2011 - September 2015).

Pleiades Foundation Support, Funded, \$2,500.00, (November 1, 2014 - June 30, 2015).

Do complementarities among forages influence animal production and welfare?, Funded, \$12,966.00, (July 1, 2014 - June 30, 2015).

Improving Ruminant Gains on Grass Pastures: Determining the Effectiveness of Condensed Tannin-containing Forages to Reduce the Negative Effects of Tall Fescue Ergot Alkaloids, Funded, \$19,899.52, (July 1, 2014 - June 30, 2015).

Training Livestock to Eat Weeds in the Tropical Pacific and Effects on Meat Quality for Stronger Ranch Profits, Funded, \$49,610.00, (2011 - 2014).

Influence of the Feeding Context to Reduce Aspen Utilization by Herbivores, Funded, \$15,000.00, (July 2013 - September 2014).

Pleiades Foundation Support, Funded, \$2,500.00, (November 2013 - June 2014).

Biochemical Diversity in Pasturelands: Influences on Foraging Behavior and Animal Production, Funded, \$29,985.00, (July 2013 - June 2014).

Understanding the impact of medusahead on herbivores to create new methods of control, Funded, \$19,777.76, (July 2012 - June 2014).

## **Presentations and Posters**

### **Adler, Peter B**

Coexistence in five perennial plant communities: weak fitness differences, strong stabilizing niche differences, and a large role for recruitment, 2014.

Forecasting climate change impacts on plant population dynamics at large spatial extents: A test case with sagebrush (*Artemisia*) species, 2014.

How does spatial heterogeneity buffer plant species against climate change?, 2014.

Niche overlap predicts the magnitude of the indirect effects of environmental change in a mechanistic resource competition model, 2014.

Is coexistence theory relevant to ecological forecasting?, 2014.

### **Aubry, Lise Myriam**

Variation in fitness components and demographic heterogeneity in female kittiwakes: effects and effect sizes revisited, December 9, 2014.

Adaptive responses to climate change in a hibernator: ecological and evolutionary drivers of persistence, June 9, 2014.

Compensation and additivity in cougar mortality: learning from heavily and lightly harvested populations, May 12, 2014.

Evaluation of harvest indices currently used for cougar management in Utah: Oquirrh, May 12, 2014.

Some Demographic Approaches to Conservation Dilemmas, March 2014.

### **Beard, Karen H**

Early season goose grazing has a greater effect than advancement of the growing season on net ecosystem exchange in a coastal wetland of western Alaska, December 9, 2014.

Leaf Tissue C:N and Soil N are Modified by Growing Season and Goose Grazing Phenology in a Sub-Arctic Coastal Wetland of Western Alaska, December 9, 2014.

Regional and scale-specific effects of land use on amphibian diversity, August 15, 2014.

Frog assemblies' homogenization across Brazil's Atlantic Forest, August 15, 2014.

Introduction effort, climate matching, and species traits as predictors of global establishment success in non-native reptiles, August 1, 2014.

Getting to the bottom of reptile establishment success, July 15, 2014.

Local citizens decide the common name of a new frog species in Brazil, July 15, 2014.

Ubiquitous effects of road disturbance on the distribution of frogs and toads in eastern and central United States, July 15, 2014.

Do Coqui Frogs Change Bird Communities in Hawaii?, June 26, 2014.

Frogger, Game Over: Roads reduce frogs across the eastern US, March 2014.

### **Brain, Roslynn G**

Linking Farmers to Chefs Statewide via USU Extension's Utah Farm-Chef-Fork Program, November 2014.

Permaculture basics, October 2014.

Renewable energy in Extension: Societal and developmental synergies and conflicts, September 2014.

Designing sustainability camps for youth, March 2014.

Using positive messaging and social media to reach new Extension clientele, March 2014.

USU Extension Sustainability, March 2014.

USU Extension Sustainability: Using social media, March 2014.

USU Permaculture Initiative, March 2014.

Utah Farm-Chef-Fork, February 2014.

Applying service-learning to enhance career skills and foster community environmental sustainability, January 2014.

### **Brunson, Mark William**

Stakeholder Perceptions of Sagebrush Management, November 13, 2014.

Living on Changing Landscapes: Is it Time to Change our Approach to Cheatgrass?, October 22, 2014.

Can Translational Ecology Help Scientists Think Beyond Shorter Words and Cooler Graphics?, August 15, 2014.

Invader, Encroacher, or Does it Matter? Ecological and Psychological Influences on Beliefs about Unwanted Conifers, August 12, 2014.

Managing Invasive Species and Wildfire: Social and Political Considerations in the Public Lands States, May 22, 2014.

What Do Citizens Believe about Management of Nuisance Wildlife, January 21, 2014.

**Burr, Steven W**

Agricultural Tourism-Developing Tourism Resources on the Farm or Ranch, November 4, 2014.

Heritage Tourism and the Bear River Heritage Area: A Study of Heritage Visitors and Heritage Businesses and Artisans, June 23, 2014.

The Economic Impact of Bear River Heritage Area Tourism in Utah and Idaho: Implications for Economic and Community Development, June 23, 2014.

Heritage Tourism and the Bear River Heritage Area: A Study of Heritage Visitors and Heritage Businesses and Artisans, June 12, 2014.

The Economic Impact of Bear River Heritage Area Tourism in Utah and Idaho: Implications for Economic and Community Development, June 10, 2014.

Expanding our understanding of visitor displacement: Voluntary or involuntary. Does the difference matter?, May 14, 2014.

**Burritt, Elizabeth A**

Aspen intake and preference by sheep: Implications for herbivory and aspen decline, November 6, 2014.

Aspen intake and preference by sheep: implications for herbivory and aspen decline., June 19, 2014.

Optimizing eXtension rangelands community of practice website, March 24, 2014.

Utah's Rangelands West Website, March 24, 2014.

Does the nutritional context enhance intake of and preference for medusahead by sheep?, February 8, 2014.

Human dimensions of medusahead control: three key questions to answer, February 12, 2014.

Using behavioral principles to meet land management objectives and improve sustainability, January 6, 2014.

**Conner, Mary M**

Squares or lines? Estimating population size via quadrat counts or distance sampling, August 26, 2014.

Every which way comes data: models for analyzing PIT tagged fish, January 13, 2014.

**Coppock, David Layne**

Symposium Keynote--Adapting Livestock Systems to Climate Change: Recent Insights from Ethiopia and Nepal, February 14, 2014.



Project Update: Sustainable Pastoralism on the Borana Plateau, October 24, 2014.

Analysis of Proposed Economic Interventions to Assist in Mitigating the Effects of Climate Change on Pastoralist Communities in the Borana Plateau of Ethiopia, June 16, 2014.

Collective Action and Climate Change, April 7, 2014.

Touchstones of a Professional Life, February 26, 2014.

Human dimensions of medusahead control: three key questions to answer, February 12, 2014.

### **Cramer, Patricia C**

Update of Research on the US 89 Paunsaugunt Project, April 15, 2014.

The state of wildlife crossings in the United States, February 2014.

Design recommendations from five years of wildlife crossing research across Utah., January 2014.

Wildlife Crossing Structures: What Progressive States are Doing., September 2013.

Design recommendations from five years of wildlife crossing research across Utah., June 2013.

Planning, Building, Researching and Adaptively Managing Wildlife Crossings, April 2013.

The state of the science and practice of wildlife crossings in Utah: 2013, March 2013.

The state of wildlife crossings in the west, December 3, 2012.

Wildlife Crossings Research in Utah: Lessons Learned, November 15, 2012.

Wildlife Crossings in Utah, November 1, 2012.

The use of science and adaptive management to perfect wildlife crossings, October 25, 2012.

Helping wildlife cross roads based on them and their movement needs., October 17, 2012.

Wildlife Crossings Research in Utah: Lessons Learned, August 2, 2012.

Helping to maintain wildlife connectivity across North American landscapes with wildlife crossings, June 10, 2012.

Transportation and Wildlife, April 2012.

Moving Wildlife Under US 93 in Montana, March 2012.

Evaluating retrofit opportunities for wildlife passage at existing bridges and culverts, January 2012.

Research of wildlife use of wildlife crossings, November 2011.

Considering wildlife by going the extra mile, November 2011.

Getting from roadkill to roadwise: wildlife crossings in the west, October 2011.

Planning and designing for wildlife in transportation systems, October 2011.

Maintaining wildlife connectivity across roads through tested wildlife crossing designs, August 2011.

Improving structures to facilitate wildlife passage: in depth review of the species movement guilds, April 2011.

Restoring Ecological Connectivity with Wildlife Crossings, November 2010.

Wildlife and Roads in Utah, an Update on What is Working and What Needs Improvement., November 2010.

Wildlife Connectivity: Keeping Wildlife Alive and Moving. Invited Speaker to Accept Conservationist of the Year Award, October 2010.

How Highways Reduce Habitat Effectiveness in Western Forests and Sage-Steppe Habitats: Challenges and Solutions, October 2010.

Wildlife Crossings in the West, keeping wildlife alive and moving, October 2010.

Wildlife and Roads: the State of Our Science and Practice, October 2010.

Retrofitting Existing Structures to Facilitate Wildlife Passage., July 2010.

Transportation Planning and Herpetological Conservation, July 2010.

Wildlife Crossings in Utah, March 2010.

Wildlife and Roads in Utah, March 2010.

Using Remote Camera Traps to Research Wildlife, November 1, 2014.

**Endter-Wada, Joanna Lynne**

Conserving Water Without Reducing Quality of Life, November 20, 2014.

Information Technologies to Support Water Conservation, October 28, 2014.

USU's Center for Water Efficient Landscaping: Current Research Efforts, April 17, 2014.

Creating Utah's water future: the politics of water management adaptation to climate change, April 11, 2014.

Neighborhood Socio-Ecohydrology along a Gradient of Urbanization, April 1, 2014.

Adapting to Drought in the Western U.S.: Balancing Agricultural, Wetland, and Urban Water Needs, March 11, 2014.

**Frazer, Nat**

Preparing Natural Resource Administrators to Work at the Science/Society Interface: An On-line Professional Masters of Natural Resources Degree, October 10, 2014.

Session Chair: Pedagogies of Science, October 11, 2014.

Sustainability, STEM, and Civic Engagement: Is Higher Education Ready for the Challenges?, March 6, 2014.

**Frey, Shandra Nicole**

Opposition to Opportunity: Managing prairie dogs in southern Utah., September 2014.

Connectivity in a fragmented landscape, June 2014.

Reasons to Love the Utah Prairie Dog, June 2014.

WREN Successes and Stumbles, March 2014.

Utah Plan Topic 1: Habitat Management Strategies, February 2014.

**Howe, Peter David**

Public perceptions of extreme heat vulnerability in the U.S., December 2014.

Perceptions of changes in local precipitation, extreme events, and monsoon variability in India, April 2014.

Communicating climate change through personal experience: insights from social science, March 2014.

The role of local weather and climate in public perceptions of climate change: Recent research and big questions, January 2014.

**Hulvey, Kristin**

Biodiversity & Ecosystem Functioning, 2014.

**Jin, Jiming**

Better regional climate modeling of the North American Monsoon, December 8, 2014.

Evaluation and improvement of climate modeling at regional scales, August 22, 2012.

Evaluation and improvement of climate modeling at regional scales., March 22, 2012.

An effective downscaling technique for winter precipitation and snowpack in the western United States, April 1, 2014.

Bias-correcting global climate model data: can we maintain physical consistency and reduce future climate projection uncertainty at the same time?, April 1, 2014.

**Kettenring, Karin Marie**

Costs and benefits of using grazing as a management tool to remove *Phragmites australis* in wetlands: An upcoming project, October 2014.

**Koons, David N**

How can ecologists become better forecasters in changing environments?, November 2014.

A diversity of conservation dilemmas with demographic solutions, March 2014.

Some Demographic Approaches to Conservation Dilemmas., March 2014.

Challenges to predicting avian population responses to environmental change, February 2014.

**Kuhns, Michael R**

Changes in urban forestry in the western U.S., October 5, 2014.

**Kulmatiski, Andrew**

The bizarre world beneath our feet, June 2014.

Plant-Soil Feedback of native and exotic species in the inter-mountain west, February 28, 2014.

The potential of and potential need for soil-based management of plant communities, July 13, 2013.

**Kurtzman, Judith A**

Preparing Natural Resource Administrators to Work at the Science/Society Interface: An On-line Professional Masters of Natural Resources Degree, October 10, 2014.

**Lant, Christopher Louis**

Evolution and empirical estimation of ecological-economic production possibilities frontiers, April 12, 2013.

Assessing the impact of climate change on ecosystem services from Midwestern watersheds, December 3, 2012.

Assessing the impact of climate change on ecosystem services from Midwestern watersheds, July 12, 2012.

Climate change, hydrology, and landscapes of America's heartland, 2011.

Panel on NSF IGERT, GK-12, PIRE, and GDEP Grants: strategies for successful proposals and projects that can boost your research and strengthen your department, 2011.

Virtual water flows among the 48 contiguous U.S. states, 2011.

Universities Council on Water Resources, 2011.

Virtual water flows among the 48 contiguous U.S. states, 2011.

Panel member: Integrated, Multi-scale Water Resources Assessments, 2010.

The water resource requirements of corn-based ethanol, 2010.

**Larese-Casanova, Mark**

Assessment and Evaluation: Measuring Impacts, November 13, 2014.

Using Assessment and Evaluation to Target Audiences and Guide Program Improvement, October 9, 2014.

Master Naturalist Program Evaluation, September 17, 2014.

Using Assessment and Evaluation to Target Audiences and Guide Program Improvement, September 17, 2014.

Assessment and Evaluation 201: Improving Extension Programs, March 6, 2014.

**Lutz, James A**

Testing an empirical model of snowpack duration using citizen science field observations from the mountains of the Pacific Northwest, September 9, 2014.

Unprecedented remote sensing data products from before and after the Rim Fire, Sierra Nevada, California, August 10, 2014.

Global diversity of large-diameter trees, August 1, 2014.

The Yosemite Forest Dynamics Plot data sets and protocols, April 18, 2014.

Historical fire regime heterogeneity in a Sierra Nevada mixed-conifer forest, March 26, 2014.

Climate drivers of forest pattern: development of wildfire refugia, March 27, 2014.

The value of observation: longitudinal data and ecosystem change, March 27, 2014.

**Macnulty, Daniel Robert**

Influence of Wolf Predation Risk on Elk Movement in Yellowstone National Park, January 9, 2014.

Predictors of elk pregnancy rate in Yellowstone National Park, January 9, 2014.

Are wolves more cooperative when hunting formidable prey?, January 7, 2014.

**Messmer, Terry A**

Science updates on greater sage-grouse conservation, January 1, 2014.

Science Behind the Utah Sage-grouse Conservation Plan, December 8, 2014.

Forum Purpose - Defining Your Place in Sage-grouse Conservation, November 13, 2014.

Greater Sage-grouse Responses to Powerlines, November 13, 2014.

Sage-grouse Responses to Forage Kochia Firebreaks, November 5, 2014.

Role of Hunting in conservation: Educating the Academics, October 22, 2014.

Science Behind the Utah Sage-grouse Conservation Plan, October 12, 2014.

Science Behind the Utah Sage-grouse Conservation Plan, September 24, 2014.

Greater Sage-grouse Responses to Conifer Removal, September 21, 2014.

International Sage-grouse Forum, September 21, 2014.

Science Behind the Utah Sage-grouse Conservation Plan, September 17, 2014.

Utah Sage-grouse Summit, July 18, 2014.

Effects of capture and handling on greater sage-grouse vital rates, June 17, 2014.

Effects of climate on greater sage-grouse vital rates, June 17, 2014.

Greater sage-grouse Population Dynamics, June 17, 2014.

Sage-grouse and Hunters, June 17, 2014.

Sage-grouse and Powerlines, June 17, 2014.

Sage-grouse Seasonal Movements in Utah, June 17, 2014.

Contemporary Knowledge Needs Regarding the Effects of Tall Structures on Sage-grouse, June 17, 2014.

Role of Jack H. Berryman Institute in Professional WDM, May 27, 2014.

Effects of capture and handling on greater sage-grouse vital rates, March 19, 2014.

Greater Sage-grouse Lek Counts and Lambda, March 19, 2014.

Utah Sage-grouse Management Areas: The Science, March 19, 2014.

Greater sage-grouse Conservation Education and Outreach, March 7, 2014.

The Science Behind the Utah Sage-grouse Conservation Plan, February 18, 2014.

Science Behind the Utah Sage-grouse Conservation Plan, January 15, 2014.

**Mock, Karen E**

Further Examination of the Geographic Range of Niles's Buckwheat, July 2014.

Further examination of the geographic range of Niles's buckwheat, March 2014.

Further examination of the geographic range of Niles's buckwheat., July 26, 2014.

**Radel, Claudia A**

'Writing Strategies' Panelist, May 15, 2014.

Service-learning, Attitudes towards Latino Immigrants, and Social Change, April 8, 2014.

Gender, the household, and land change in southeastern Mexico, March 19, 2014.

Impact of migration on land use and gender relations in Calakmul, Mexico, January 7, 2014.

**Ramsey, Robert Douglas**

Using remote sensing to understand spatiotemporal landscape dynamics of aspen decline in southern Utah's Cedar Mountain, October 27, 2010.

A remote sensing landscape analysis of sudden aspen decline (SAD) in southern Utah's Cedar Mountain, February 7, 2010.

**Schmidt, Robert H**

Hating cats, loving birds? The magic of the message, March 4, 2014.

**Schupp, Eugene W**

Resilience to Disturbance and Management Treatments and Resistance to Invasive Annual Plants in Sagebrush and Piñon Pine/Juniper Ecosystems, October 2014.

Imazapic interacts with perennial grass cover to mediate cheatgrass cover after fuels reduction treatments in arid Wyoming big sagebrush sites, August 2014.

Restoration of Greater Sage-Grouse habitat: a framework for landscape and site-specific decisions, August 2014.

SageSTEP: Short-term vegetation responses to fuels treatments in sagebrush ecosystems, May 22, 2014.

**Tainter, Joseph A**

Complexity, Collapse, and Sustainability, November 21, 2014.

What is Transformation?, November 17, 2014.

Complexity and Collapse: What is the Role of Climate?, June 17, 2014.

Energy Gain and Complexity: Using the Human and Ecological Past to Understand our Future, April 24, 2014.

Depletion and Innovation: The Sustainability Balancing Act., February 14, 2014.

Resource Trends: The Fundamental Question of Sustainability, January 23, 2014.

**Thacker, Eric T**

Rangeland issues in Utah: Wild horses, October 20, 2014.

Energy Development in Rangelands Part 1: A Call for a Disciplinary Shift, February 3, 2014.

Energy Development in Rangelands Part 2: Impacts on Ecosystem Services, February 3, 2014.

Impacts on Prairie-Chicken Habitat from Management of Rangeland Fuels, February 2, 2014.

Relating Grazing Utilization to Fuels Properties in Sagebrush Bunchgrass Community, February 2, 2014.

Identification of diet supplements for elk management, April 2014.

Identification of diet supplements for elk management, March 2014.

**Van Miegroet, Helga**

Organo-mineral interactions promote greater soil organic carbon storage under aspen in semi-arid montane forests in Utah, December 15, 2014.

Soil Organic Carbon - an old story with and new future, November 2, 2014.

Foliage and root contribution to SOC pools in Utah forest soils, October 5, 2014.

SOC dynamics in aspen and conifer soils in montane forests in Utah. USA., July 13, 2014.

**Veblen, Kari**

A tale of two hotspots: the roles of termites, elephants, and cattle in creating and maintaining landscape heterogeneity, December 19, 2014.

Sagebrush seedling recruitment following tebuthiuron treatment, October 2014.

Costs and benefits of using grazing as a management tool to remove *Phragmites australis* in wetlands: An upcoming project, October 2014.

Fire, cattle and wildlife interactions: Effects on trees and herbaceous community in East African rangeland, October 2014.

Sagebrush seedling recruitment following tebuthiuron treatment, October 2014.

Cattle-wild ungulate effects on sagebrush plant communities, August 2014.

Grass-shrub spatial pattern response to a moisture gradient in Great Basin sagebrush communities, August 2014.

Interactive effects of large ungulates and abiotic factors on state shifts in sagebrush plant communities, August 2014.

Native and domestic browsers and grazers reduce fuel loads, fire temperatures, and acacia-ant mortality in an African savanna, August 2014.

The nature of species interactions shifts dramatically between time periods, August 2014.

Outreach presentation, May 2014.

Context-dependent plant community dynamics and applications to rangeland systems, April 2014.

Identification of diet supplements for elk management, April 2014.

Interactive effects of fire and herbivory on survival of acacia-ant symbionts in an African savanna, March 2014.

Identification of diet supplements for elk management, March 2014.

Large ungulate effects on sagebrush plant communities: implications for maintaining vital forage habitat for multiple ungulate species, March 2014.

Cattle-wild ungulate effects on sagebrush plant communities in northern Utah, February 2014.

Pinpointing ecological thresholds: how much cattle impact is needed to generate persistent ecosystem hotspots?, February 2014.

**Villalba, Juan J**

Homeostasis in living organisms and the case of self-medication in herbivores, November 20, 2014.

Learning and self-medication, November 20, 2014.



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