

SUSAN P. RUPP

Curriculum Vitae

Business Address

Envirosapes Ecological Consulting
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Permanent Address

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EDUCATION:

- 2001-2005 TEXAS TECH UNIVERSITY – Lubbock, Texas
- Ph.D., Wildlife Science (Minor, Biology) – December 2005
 - Dissertation title: “Ecological impacts of the Cerro Grande Fire: Predicting elk movement and distribution patterns in response to vegetative recovery through simulation modeling”
 - GPA – 4.0/4.0 (231 semester hours)
- 1997-2000 TEXAS TECH UNIVERSITY – Lubbock, Texas
- M.S., Wildlife Science – December 2000
 - Thesis title: “Effects of grazing and trampling by Rocky Mountain elk (*Cervus elaphus nelsoni*) on the vegetative community of Bandelier National Monument, New Mexico”
 - GPA – 4.0/4.0 (92 semester hours)
- 1990-1994 COLORADO STATE UNIVERSITY – Ft. Collins, Colorado
- B.S., Double Major; Biology and Wildlife Biology - May 1994
 - Minor, Spanish - May 1994
 - University Honors Scholar - GPA: 3.62/4.0 (143 semester hours)
- 1986-1990 SANTA FE HIGH SCHOOL- Santa Fe, New Mexico
- High School Diploma – June 1990
 - Honors Program Scholar
 - College Preparatory Coursework; Vigorous Advance Placement Courses
 - Graduated 4th in a class of 440 – GPA: 4.47/4.0

WORK HISTORY:

2012 – present ENVIROSCAPES ECOLOGICAL CONSULTING

Brookings, SD

Owner/Lead Consultant

Provide scientific-based information and assessments to assist managers, politicians, and stakeholders in making ecologically sound decisions; emphasis in renewable energy

- Offered non-competitive contract from National Wildlife Federation to develop high-level

BMPs for grassland and wildlife conservation in the upper Midwest (2012-2013)

2006-2012 SOUTH DAKOTA STATE UNIVERSITY Brookings, SD

Assistant Professor

- Teach various courses as assigned at both the graduate and undergraduate level
- Advise and mentor graduate and undergraduate students
- Establish statewide/national/international research and teaching programs in wildlife ecology and habitat use
- Publish research findings in quality peer-reviewed outlets
- Actively participate in professional organizations and present results of research
- Engage in extension activities and assist public with data, dissemination, and information

Courses Taught: Principles of Wildlife Management (WL411/411L), Wildlife and Fisheries Techniques (WL230), Natural Resource Modeling (WL720), International Experience – South America (ABS 482/582), Environmental Conservation (WL110), Applied Habitat Management (WL400)

2006 UNIVERSITY OF NEW MEXICO (Los Alamos) Los Alamos, NM

Instructor on Record

- Trained students in basic biological laboratory techniques, such as metric measurements, analysis of biochemical reactions, use of microscopes, and simple mathematical analysis of results.
- Assisted students to practice making careful observations, recording data, predicting and analyzing results of experiments, and explaining observations and results.
- Exposed students to real biological specimens representing a wide variety of organisms

Course Taught: Biology for Health Related Sciences & Non-Majors Laboratory (BIOL124L)

2006 ENVIROSCAPES ECOLOGICAL CONSULTING Albuquerque, NM

Independent Contractor/Owner

- Collaborate with the Valles Caldera National Preserve on elk management in northern New Mexico by using a spatially explicit model (SAVANNA) to model elk-cattle interactions and other ecological phenomena as directed by the Preserve

2000-2005 LOS ALAMOS NATIONAL LABORATORY Los Alamos, NM

Graduate Research Assistant –Ph.D. candidate (Texas Tech University)

Major Advisor: Dr. David Wester (TTU) (361)593-4000
 Supervisor: Leslie Hansen (LANL) (505) 665-8961
 Previous Supervisor: Carey Bare (LANL) (970) 264-1333
 Mentor: James Biggs (LANL) (505) 747-5453

- Utilize ESRI ArcView/ArcGIS software and FORTRAN to develop and calibrate a spatially explicit, process-oriented ecosystem model to analyze post-fire successional patterns (SAVANNA model) following the Cerro Grande Fire
- Integrate an individual-based movement model to analyze elk movement/distribution across Los Alamos National Laboratory and the Jemez Mountain Region
- Determine major movement pathways across LANL and the greater Jemez Mt. region
- Collaborate with surrounding agencies, individuals, and groups interested in elk management in northern New Mexico (e.g., NM Game & Fish, Bandelier National Monument, US Forest Service, Valles Caldera National Preserve, Santa Clara Pueblo, San Ildefonso Pueblo, Cochiti Pueblo, Jemez Pueblo, Seeking Common Ground, landowners, private citizens, etc.)
- Assist with large game (elk, deer, bear) captures and monitoring
- Conduct fixed-wing flight surveys to locate and monitor collared elk for LANL and Bandelier National Monument
- Evaluate innovative avenues for data analysis, collection, and integration during model development and calibration (e.g., new techniques in remote sensing)
- Troubleshoot technical problems with equipment or projects as they arise
- Serve as reserve biologist/technical staff member and official LANL contact for elk program
- Complete mandatory coursework for Ph.D.
- Generate papers on dissertation project and associated research for publication in peer reviewed scientific literature
- Attend professional meetings and present personal research in these settings
- Assist with student teaching when possible

1997-2000

TEXAS TECH UNIVERSITY

Lubbock, TX

Graduate Research Assistant –M.S. candidate

Major Advisor: Dr. Mark Wallace (806) 742-1983

Co-Advisor: Dr. Rob Mitchell (402) 472-1546

- Designed and implemented research project to study the effects of grazing and trampling by Rocky Mountain elk (*Cervus elaphus nelsoni*) on the vegetative community at Bandelier National Monument, New Mexico
- Reviewed scientific literature pertinent to research project
- Supervised undergraduate students and volunteers hired to assist with project
- Completed mandatory coursework for M.S.
- Generated papers on thesis project and associated research for publication in peer reviewed scientific literature
- Attended professional meetings and presented personal research in these settings
- Attended National Park Service meetings and served as research consultant
- Accumulated a broad, working knowledge of biological and natural resource information and associated analytical skills
- Developed critical thinking and research skills that aided in the continued learning process and advancement toward professional objectives

1996-1997 NEW MEXICO DEPARTMENT OF GAME & FISH

Santa Fe, NM

Wildlife Specialist

Supervisor: Kerry Mower

(505) 476-8080

- Assimilated/analyzed big game harvest data and compiled formal reports of survey results for public and private use throughout the state of New Mexico
- Coordinated and organized public/private depredation hunts (elk, deer, oryx) and relevant information in the state of New Mexico
- Mediated communication among private landowners, hunters, area personnel, and public

1996 FOREST CONSERVATION COUNCIL

Santa Fe, NM

Independent Contractor

Project Leader: John Talberth

(505) 988-9126

- Developed a technique for structuring wildlife guilds in southwestern old-growth forests
- Generated a list of obligate old-growth species found in the Southwest
- Assimilated and analyzed data in each of five different forest types found in the Southwest: ponderosa pine, mixed conifer, aspen, pinyon-juniper, and spruce-fir
- Contributed knowledge to assist in the production of an old-growth status report distributed to interested individuals in the Southwest
- Enriched my knowledge of old-growth wildlife species and forest types through in depth literature review and personal communications with professionals whose expertise is in old-growth research
- Periodically updated Forest Conservation Council of progress made on contract
- Generated and maintained a system for billing Forest Conservation Council for time spent working as independent contractor

1996 NEW MEXICO DEPARTMENT OF GAME & FISH

Santa Fe, NM

Research

Technician (temp)

Supervisor: Greg Schmitt (retired)

(505) 827-9925

Supervisor: Jon Klingel (retired)

(505) 827-9912

- Updated species accounts in NM Game & Fish database system (Biological Information System of New Mexico or “BISON-M”) with relevant information for species found in NM
- Assisted with filing and documentation of museum specimens
- Developed filing system for scientific articles
- Assisted personnel with computer technical support

1994-1995 COLORADO DIVISION OF WILDLIFE

Ft. Collins, CO

Wildlife Technician I

Supervisor: Gary Skiba (303) 291-6711

Supervisor: Rosalind Yanishevsky (303) 459-3253

- Co-authored manual for management of breeding habitat of selected songbirds in Colorado and published by Colorado Division of Wildlife
- Reviewed scientific literature on 120+ bird species found throughout the Rocky Mtns.
- Assisted in compilation of species accounts
- Supervised two employees with raw data acquisition

1990-1995 COLORADO STATE UNIVERSITY Ft. Collins, CO

1994-1995 Student Technician - Department of Forest Sciences

- Assisted graduate student with summer field work, data acquisition and habitat analysis of piñon pine communities in Colorado, Nevada, Arizona, and NM
- Learned techniques for morphometric analysis of piñon pine communities

1993-1994 Student Research Technician - Department of Biology

Supervisor: Dr. Bruce Wunder (970) 491-5949

- Developed research projects in small mammal physiology
- Conducted laboratory research on the effect of ambient temperature on chewing behavior and food particle size in the prairie vole, *Microtus ochrogaster*
- Responsible for laboratory care and maintenance

1991-1993 Student Research Technician - Department of Plant Pathology

Supervisor: Dr. Howard Schwartz (970) 491-6987

- Assisted with bean and onion pathogen research and treatment in eastern CO
- Responsible for greenhouse management and maintenance
- Experience handling and applying various fungicides, insecticides, and herbicides
- Designed and implemented integrated pest management program for greenhouse
- Prepared growth media plates for laboratory proliferation of various pathogens

1992 Student Research Volunteer - Colorado Division of Wildlife/CSU

Supervisor: Dick Bartmann (xxx) xxx-xxxx

Supervisor: Gary White (970) 491-6678

- Assisted trapping, collaring, and processing mule deer for a long-term study on compensatory mortality in the Piceance Basin of northwest Colorado

Professional Affiliations (Offices Held in Bold):

- Member, Rocky Mountain Elk Foundation (2008 – present)
 - **Representative, Project Advisory Committee** (2007 – 2012)
- U.S. International Association for Landscape Ecologists (USIALE) (2007 – 2009)
- Member, Phi Kappa Phi Honor Society (2004 – present)
- Member, Jemez Mountains Seeking Common Ground (2000-2008) – collaborative group made up of various agencies, non-profits, and citizens dedicated to address elk issues in northern New Mexico.
- Member, The Wildlife Society (1998-present)
 - **Chairperson**, Fellowship of Christian Conservationists (2010 - present)
 - **Chairperson**, Conservation Education Awards Committee (2012)
 - **Chairperson**, TWS Biofuels Technical Review Committee (2010 - 2012)
 - **Moderator**, “Biofuels and biodiversity in managed forests.” 18th Annual Conference of The Wildlife Society (November 2011), Waikoloa, Hawaii.
 - Member, Renewable Energy Working Group (2010)
 - Member, College and University Wildlife Education Working group (2010)
 - Member, The Leadership Institute Advisory Committee (2008 – present)
 - Member, Central Mountains and Plains Section (2007 – present)
 - Member, South Dakota State Chapter (2007 – present)
 - ◆ **Secretary/Treasurer** of SD Chapter of TWS (2010 – present)
 - ◆ **Chairperson**, Certification Committee (2007 – present)
 - ◆ **Chairperson**, Biofuels Committee (2008 – present)
 - Member, GIS, Remote Sensing, and Telemetry Working Group (2003-present)
 - Member, Southwest Section (1998-2009)
 - Member, International Working Group (1998-2002)
 - **Representative**, Conservation Education Awards Committee (2000-2001)
 - Member, Biological Diversity Working Group (1998-2002)
 - Member, New Mexico Chapter of TWS (1999-2009)
- Member of the “Bien Dicho” chapter of Toastmasters International (2002-2003)
- Member, Society for Conservation Biology (1992 - 1994, 1996 - 2006)
- Member, Society for Range Management (1998-1999)
 - Member, New Mexico Section of SRM (1998-1999)

Professional Reviewer for:

- *Ecosphere* (2012)
- *Wildlife Society Bulletin* (2012)
- *Forest Ecology and Management* (2010)
- *Journal of Mammalogy* (2010)
- *Journal of Geophysical Research – Biogeosciences* (2009)
- *American Midland Naturalist* (March 2008)
- *Great Plains Research* (March 2008)
- *International Arid Lands Consortium* (January/February 2007)
- *Ecology* (2007)

Awards, Activities & Acknowledgements:

- South Dakota Growing Magazine. Spring 2012. “Creative Collaboration: Students, Landowners, & Industry Professionals Pair Up for a Positive Experience” by K. Gordon – Article highlighting the “Students to Empowered Professionals (STEP)” mentoring program I created in 2010.
- Outstanding Open Presentation, South Dakota Chapter of The Wildlife Society, Oacoma, SD (2012)
- Lifetime member, Cambridge Who’s Who Registry of Executives, Professionals & Entrepreneurs

- Requested to carry “Graduate School” banner, Texas Tech commencement ceremony (Dec. 2005)
- Awarded Outstanding Poster Presentation in Earth and Space Sciences Category – Los Alamos National Laboratory Student Symposium (2005)
- Phi Kappa Phi Honorary (2004)
- **Canon National Parks Science Scholars Award** (2001 National Award Recipient)
- Nominated as Student Peer Advisor – Environmental, Safety, and Health Division (ESH), Los Alamos National Laboratory (2001)
- Volunteer, U.S. Peace Corps – Honduras (1995)
- Phi Beta Kappa Honorary (1994)
- Golden Key National Honor Society (1993)
- "Best Undergraduate Student Research Proposal," Student Research Symposium, Department of Biology, Colorado State University (1992 - 1993)
- National Dean's List (1990-1994)
- Recipient, Girl Scouts of America Gold Award (1987)

Grants:

<u>Title & Source</u>	<u>Dates</u>	<u>Total Awarded</u>
<p><i>Authors:</i> Rupp, S. P. <i>Title:</i> CAREER: Sustainable Bioenergy Production and Economic Diversification in Multiple-Use Landscapes of the Prairie Pothole Region of South Dakota. <i>Source:</i> National Science Foundation. <i>(Note: Proposal currently under review.)</i></p>	2012-2016	\$719,854
<p><i>Authors:</i> Rupp, S. P. <i>Title:</i> Active Learning Cloud Small Grant <i>Source:</i> South Dakota State University</p>	2011	\$2,500
<p><i>Authors:</i> Bucking, H., J. Gonzalez, and others <i>Title:</i> REU Site: Interdisciplinary Undergraduate Research Projects on Bioenergy Crops: Feedstock development, Bioprocessing and Sustainable Agriculture (<i>mentor</i>) <i>Source:</i> National Science Foundation</p>	2010–2013	\$294,600
<p><i>Authors:</i> Johnson, P., S. P. Rupp, A. Boe, and V. Owens <i>Title:</i> Biofuel Crops in Eastern South Dakota: Establishment, Productivity, Biotic Impact, and Multiple Use Potential <i>Source:</i> North Central Sun Grant Center (DOE)</p>	2010–2013	\$339,575
<p><i>Authors:</i> Hubbard, D., J. Jenks, and S. P. Rupp <i>Title:</i> Modeling the effects of land conversion on ring-necked pheasants (<i>Phasianus colchicus</i>) in the Northern Great Plains (<i>co-collaborator</i>) <i>Source:</i> South Dakota Department of Game, Fish and Parks</p>	2010–2012	\$90,000
<p><i>Authors:</i> Rupp, S. P. <i>Title:</i> Sustainable Harvest Strategies for Biofuel and Wildlife Production: An Economic Assessment <i>Source:</i> North Central SunGrant Center</p>	2010–2011	\$17,377

<p><i>Authors:</i> Lehman, C., S. P. Rupp, C. Sheaffer, D. Wyse, and S. Taff <i>Title:</i> Harvesting biofuels from working prairies for conservation and commerce <i>Source:</i> USDA/NRCS Conservation Innovation Grant</p>	2009–2011	\$1,012,000
<p><i>Authors:</i> Swanson, L. and S. P. Rupp <i>Title:</i> Urban Canada goose management using non-invasive barrier techniques (Undergraduate Project) <i>Source:</i> Animal Welfare Institute</p>	2009–2011	\$10,000
<p><i>Authors:</i> Rupp, S. P. <i>Title:</i> Assessing the current state of knowledge with regard to bighorn sheep (<i>Ovis canadensis</i>) at Rocky Mountain National Park, Colorado <i>Source:</i> Cooperative Ecosystems Study Unit/ National Park Service</p>	2008-2012	\$72,867
<p><i>Authors:</i> Rupp, S. P., A. Jarding, and L. Schmitz <i>Title:</i> Improving elk population estimates through Development of a sightability model for elk In the Black Hills of South Dakota <i>Source:</i> Rocky Mountain Elk Foundation</p>	2008-2010	\$12,865
<p><i>Authors:</i> Rupp, S. P., A. Boe, K. Forman, and C. Switzer <i>Title:</i> Developing sustainable harvest strategies for cellulose-based biofuels: The effect of intensity & season of harvest on wildlife and biomass production <i>Source:</i> South Dakota Game, Fish and Parks</p>	2008-2011	\$119,001
<p><i>Authors:</i> Rupp, S. P., A. Boe, E. VanDerSluis <i>Title:</i> Developing sustainable harvest strategies for cellulose-based biofuels: The effect of intensity & season of harvest on wildlife and biomass production <i>Source:</i> National Fish and Wildlife Foundation “2007 Budweiser Renewable Energy and Wildlife Conservation Research Prize”</p>	2008–2011	\$100,000
<p><i>Authors:</i> <i>Title:</i> Developing sustainable harvest strategies for cellulose-based biofuels: The effect of intensity & season of harvest on wildlife and biomass production <i>Source:</i> Agricultural Experiment Station Seed Grant Program (SDSU)</p>	2007	\$20,000
<p><i>Authors:</i> Rupp, S. P. and L. Schmitz <i>Title:</i> Development of a sightability model for Rocky Mtn. elk (<i>Cervus elaphus nelsoni</i>) in the Black Hills of South Dakota (Federal Aid Study 7533) <i>Source:</i> South Dakota Game, Fish and Parks/Federal Aid</p>	2007-2010	\$157,587
<p><i>Authors:</i> <i>Title:</i> In house grant for new faculty start-up research and teaching equipment funds <i>Source:</i> College of Agriculture and Biological Sciences, & Dept. Wildlife and Fisheries, Sciences, South Dakota State University</p>	2007	\$~13,000

<i>Authors:</i>	2005	\$175,000/yr
<i>Title:</i> Congressional and Community Outreach of New Mexico Collaborative		
<i>Source:</i> Children, Youth and Families Division (NM)		
<i>Authors:</i> Rupp, S. P. and A. Edenfield-Sweet	2005	\$2,000
<i>Title:</i> Wings for L.I.F.E. (L ife-skills for I nmate F amilies & E ducation)		
<i>Source:</i> Armstrong-Clark Foundation		
<i>Authors:</i> Rupp, S. P.	2001–2004	\$75,000
<i>Title:</i> Ecological Impacts of the Cerro Grande Fire: Predicting elk distribution and movement patterns in response to vegetative recovery through simulation modeling		
<i>Source:</i> Canon National Parks Science Scholars Award (jointly sponsored by Canon USA, NPS, and AAAS)		

Contributions (2004) ^a

Valles Caldera National Preserve	\$ 5,000
Telonics, Inc.	\$ 4,500
U.S. Forest Service	\$ 2,500
Santa Clara Pueblo	\$ 2,000
New Mexico Dept. Game and Fish	<u>\$ 2,508</u>
	\$16,508

^{a)} I solicited and accumulated funds and services from various agencies within a 2.5 week period to recapture 31 elk when all but one of the pre-programmed release mechanisms on their store-on-board GPS radio collars failed to work. We needed to retrieve the collars in order to process the data.

Scholarships (Ph.D.):

<u>Title & Source</u>	<u>Dates</u>	<u>Total Awarded</u>
Canon National Parks Science Scholars Award	2001 – 2004	\$75,000
ARCS Scholarship, Lubbock Chapter of ARCS	2001, 2002, 2004	\$15,000
G.R. White Trust Fellowship, Texas Tech University	2001-2004	\$ 3,000

Peer-Reviewed Publications:

Rupp, S. P. (Chair), L. Bies, A. Glaser, C. Kowaleski, T. McCoy, T. Rentz, S. Riffell, J. Sibbing, J. Verschuyt, T. Wigley. 2012. Impacts of bioenergy development on wildlife and wildlife habitat. The Wildlife Society Technical Review 12-03. The Wildlife Society, Bethesda, Maryland, USA. December 2012

- Grovenburg, T. W., C. N. Jacques, C. S. DePerno, C. P. Lehman, T. J. Brinkman, R. W. Klaver, K. A. Robling, S. P. Rupp, and J. A. Jenks. 2012. Heterogeneity in habitat type and vertical heights: Effects on accuracy of radiotelemetry locations. *Wildlife Biology* xx(x):xxx-xxx.
- Rupp, S. P. 2012 (*in press*). Practical dissonance: Bridging the gap between agencies and academia. *Wildlife Society Bulletin* xx(x):xxx-xxx.
- Rupp, S. P. 2012. Sustainable harvest strategies for biofuels and wildlife production. Pages 34 – 37 *in* Glaser, A., ed. 2012. America's Grasslands Conference: Status, Threats, and Opportunities. Proceedings of the 1st Biennial Conference on the Conservation of America's Grasslands. August 15- 17, 2011, Sioux Falls, SD. Washington, DC and Brookings, SD: National Wildlife Federation and South Dakota State University.
- Rupp, S. P., and P. Rupp. 2010. Development of an individual-based model to evaluate elk (*Cervus elaphus nelsoni*) movement and distribution patterns following the Cerro Grande Fire in north central New Mexico, USA. *Ecological Modelling* 221(12):1605-1619.
- Rupp, S. P. 2005. Ecological impacts of the Cerro Grande Fire: Predicting elk movement and distribution in response to vegetative recover through simulation modeling. Ph.D. Dissertation, Texas Tech University, December 2005. 451 pp.
- Rupp, S. P., M. C. Wallace, D. Wester, S. Fettig, and R. Mitchell. 2001. Effects of simulated elk grazing and trampling (I): Intensity. *Alces* 37(1):129-146.
- Rupp, S. P., M. C. Wallace, D. Wester, S. Fettig, and R. Mitchell. 2001. Effects of simulated elk grazing and trampling (II): Frequency. *Alces* 37(1):147-161.
- Rupp, S. P. 2000. Effects of grazing and trampling by Rocky Mountain elk (*Cervus elaphus nelsoni*) on the vegetative community of Bandelier National Monument, New Mexico. M.S. Thesis, Texas Tech University, December 2000. 102 pp.
- Rupp, S. P., W. B. Ballard, and M. C. Wallace. 2000. A nationwide evaluation of deer hunter harvest survey techniques. *Wildlife Society Bulletin* 28(3):570-578
- Manuscripts in Review/Revision (Undergrad in BOLD):***
- Hegge, K.,** P. J. Johnson, and S. P. Rupp. 20XX (*in review*). Prevalence and behavior of *Blastobasis repartella* (Dietz) in switchgrass. Pages xxx-xxx *in* South Dakota State University Journal of Undergraduate Research xx(x).
- Rupp, S. P. and M. D. Miller. 20XX (*in revision*). Sustainable production of biomass for wildlife and economic diversification in the northern Great Plains. North Central SunGrant Center.
- Rupp, S. P. In the Mirror: The Changing Face of the Wildlife Profession. Submitted to The Wildlife Professional. March 2012 (*In Review*).

Manuscripts In Preparation (Undergrad in BOLD):

Solem, A., J. Bender, S. P. Rupp, and D. B. Wester. *In Preparation*. Flushing effects of nesting ring-necked pheasant (*Phasianus colchicus*) using and auditory stimuli. *The Prairie Naturalist* X:XXX-XXX.

Bender, J., A. Solem, S. P. Rupp, and D. B. Wester. *In Preparation*. Abundance and diversity of nesting game birds in relation to simulated biofuel harvest strategies in the upper-Midwest. *Journal of Wildlife Management* X:XXX-XXX.

Solem, A., J. Bender, S. P. Rupp, and D. B. Wester. *In Preparation*. Nesting success and initiation date in relation to simulated biofuel harvest strategies in the upper-Midwest. *Journal of Wildlife Management* X:XXX-XXX.

Bender, J., A. Solem, A. Maves, **H. Waterman**, and S. P. Rupp. *In Preparation*. Biofuel harvest for the production of cellulosic ethanol: A detailed look in lignin and carbohydrate concentration in relation to season of harvest. *Biomass and Bioenergy* X:XXX-XXX.

Solem, A., S. Rupp, and J. Bender. *In Preparation*. Biofuel harvest implications for the production of cellulosic ethanol : Macro and micro-nutrient concentration in relation to season of harvest. *Biomass and Bioenergy* X:XXX-XXX.

Solem, A., and S. Rupp. *In Preparation*. Carbohydrate concentration quality in relation to plant species composition for the production of cellulosic ethanol. *Plant Science* X:XXX-XXX.

Gaston, E., B. Carroll, and S. P. Rupp. *In Preparation*. Using fluorescent pigments to assess variation in distances traveled by *Blarina brevicauda* after trapping across experimental biofuels plots in the Northern Great Plains. *The Prairie Naturalist* X:XXX-XXX.

Bhoir, P., B. Carroll, and S. P. Rupp. *In Preparation*. Analysis of bait preference of small mammals captured within experimental biofuels plots. *The Prairie Naturalist* X:XXX-XXX.

Rupp, S. P. *In Preparation*. Evaluation of a student-professional mentoring program: opportunities to bridge communication between academia and the professions. *Journal of Scholarship of Teaching and Learning* X:XXX-XXX.

Book Chapters:

Rupp, S. P., A. Munoz, and R. R. Lopez. 2013 (*in press*). Developing management plans. Chapter 16 in Krausman, P. R., and J. W. Cain (eds). *The Basics of Wildlife Management*. Textbook to be published in the TWS Book Series in cooperation with Johns Hopkins University Press (*Anticipated release Oct. 2013*)

Educational Publications:

Rupp, S. P. *In Preparation*. Evaluation of a student-professional mentoring program: opportunities to bridge communication between academia and the professions. *Journal of Scholarship of Teaching and Learning* X:XXX-XXX.

Rupp, S. P., J. Bender, and J. Haukos. *In Preparation*. Pondering the price of prairie dogs. National Center for Case Study Teaching in Science Case Collection, State University of New York, Buffalo, New York.

Popular Publications:

Rupp, S. P. 2010. In the face of fear. Commentary. The Wildlife Society Leadership Chronicles. Volume 1(4), December 2010.

Rupp, S. P. 2008. Research tracks elk after wildfire: Model suggests Cerro Grande Fire improved habitat. New Mexico Wildlife Magazine. New Mexico Wildlife Magazine is published by the New Mexico Department of Game and Fish and has a circulation of 350,000 in 32 papers statewide in New Mexico.

Rupp, S. P., D. B. Wester, and J. R. Biggs. 2002. Development of a spatially explicit, individual-based model for evaluation of elk movement and distribution in the eastern Jemez Mountains, New Mexico. Pages 13-14 *in* Research Highlights – 2002. Noxious Brush and Weed Control; Range, Wildlife, & Fisheries Management. Volume 33. D. B. Wester and C. M. Britton, eds. - College of Agricultural Sciences and Natural Resources, Texas Tech University, Lubbock, Texas.

Wallace, M. C., R. B. Mitchell, S. Fettig, C. Allen, S. Rupp, J. Davidson, and E. Wolf. 1999. Evaluating impacts of elk on Bandelier National Monument. Page 23 *in* Research Highlights – 1999. Noxious Brush and Weed Control; Range, Wildlife, & Fisheries Management. Volume 30. D. B. Wester and C. M. Britton, eds. - College of Agricultural Sciences and Natural Resources, Texas Tech University, Lubbock, Texas.

Rupp, S. P., M. C. Wallace, and R. B. Mitchell. 1998. Effects of trampling and grazing by Rocky Mountain elk on vegetative communities at Bandelier National Monument, New Mexico. Page 30 *in* Research Highlights – 1998. Noxious Brush and Weed Control; Range, Wildlife, & Fisheries Management. Volume 29. D. B. Wester and C. M. Britton, eds. - College of Agricultural Sciences and Natural Resources, Texas Tech University, Lubbock, Texas.

Wallace, M. C., R. B. Mitchell, L. Vermeire, S. Rupp, and A. Ganguli. 1997. Evaluating impacts of elk on Bandelier National Monument. Pages 22-23 *in* Research Highlights – 1997. Noxious Brush and Weed Control; Range, Wildlife, & Fisheries Management. Volume 28. D. B. Wester and C. M. Britton, eds. - College of Agricultural Sciences and Natural Resources, Texas Tech University, Lubbock, Texas.

Yanishevsky, R. and S. P. Rupp. 1998. Management of breeding habitat for selected bird species in Colorado. Joint research report of the Colorado Division of Wildlife and Great Outdoors Colorado. Denver, Colorado. 791 pp.

Talberth, J., Cameron, D., and Rupp, S. 1997. Old growth forests in the American Southwest: Values, status, management, and threats. Southwest Forest Alliance and Forest Guardians, Santa Fe, New Mexico.

Invited Presentations - National Conference Presentations

- Rupp, S. P., L. Bies, A. Glaser, C. Kowaleski, T. McCoy, T. Rentz, S. Riffell, J. Sibbing, J. Verschuyt, and T. Wigley. 2012. Effects of Bioenergy Production on Wildlife and Wildlife Habitat: TWS Technical Review Series. 2012 Annual Meeting of the Central Mountains and Plains Section of The Wildlife Society, Mandan, North Dakota.
- Rupp, S. P. 2012. Students to Empowered Professionals Mentoring Program: A Case Study. 9th Biennial Conference University Education in Natural Resources, March 22 – 24, 2012. Fort Collins, CO.
- Rupp, S. P. 2011. Wildlife impacts of biofuel harvest scenarios. Midwest Fish and Wildlife Conference, December 2011. Des Moines, Iowa.
- Rupp, S. P. 2011. Sustainable harvest strategies for biofuels and wildlife production. America's Grasslands Conference: Status, Threats, and Opportunities. August 15-17, 2011. Sioux Falls, SD.
- Rupp, S. P. 2011. Going green: can wildlife and biofuels be compatible?" Agricultural Watershed Institute's Sangamon Watershed Celebration, June 17 – 18, 2011. Decatur, Illinois.
- Rupp, S. P. 2009. Wildlife biodiversity as a component of sustainability. American Society of Agronomists (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA) joint annual meeting, November 1-5, 2009. Pittsburg, PA.
- Rupp, S. P. 2009. "Status of Rocky Mountain bighorn sheep (*Ovis canadensis canadensis*) at Rocky Mountain National Park," 1-day workshop (served as moderator/facilitator), January 26, 2009. Estes Park, Colorado.
- Rupp, S. P. 2009. Maintaining ecological integrity in an age of biofuels. North Central SunGrant Annual Meeting, January 15, 2009. Minneapolis, Minnesota.
- Rupp, S. P. 2007. Invited to sit on panel discussing "Career development: alternative paths in science and conservation" at the Canon National Parks Science Scholars 10th Anniversary retreat, Grand Canyon National Park, October 11, 2007.
- Rupp, S. P. 2007. Update on current research to Canon National Parks Science Scholars Program leadership and participants. Canon National Parks Science Scholars 10th Anniversary retreat, Grand Canyon National Park, October 11, 2007
- Rupp, S. P. 2006. Modeling elk movement and distribution patterns following the Cerro Grande Fire. Oral presentation sponsored by the GIS, Remote Sensing, and Telemetry Working Group during TWS Annual Meeting, September 2006.

International Poster/Oral Presentations

- Rupp, S. P. 1997. A technique for structuring wildlife guilds in southwestern old-growth communities. Page 173 in Final Program: 1997 Annual Meeting of the Society for Conservation Biology. June 1997. Victoria, British Columbia.

National Poster/Oral Presentations

- Riffell, S., S. P. Rupp, J. Verschuyt, T. B. Wigley, L. Bies, A. Glaser, C. Kowaleski, T. McCoy, T. Rentz and J. Sibbing. 2012. Effects of bioenergy production on wildlife and wildlife habitat: an overview of the forthcoming TWS Technical Review and implications for forestry in the Southeast. 66th Annual Conference of the Southeastern Association of Fish and Wildlife Agencies, Hot Springs, Arkansas.
- Maves, A. J., S. P. Rupp, K. C. Jensen, and R. W. Klaver. 2010. Developing sustainable harvest strategies for cellulose-based biofuels: The effects of intensity of harvest on migratory grassland songbirds. Poster Presentation, 17th Annual Conference of TWS (September 2010) – Snowbird, Utah.
- Phillips, E. C., S. P. Rupp, J. A. Jenks, R. W. Klaver, L. E. Schmitz, and A. R. Jarding. 2010. Development of an elk sightability model for the Black Hills of South Dakota. Poster Presentation, 17th Annual Conference of TWS (September 2010) – Snowbird, Utah.
- Rupp, S. P. 2010. Status of the Mummy Range subpopulation of Rocky Mountain bighorn sheep (*Ovis canadensis*) at Rocky Mountain National Park, Colorado. Oral Presentation, 17th Biennial Symposium of the Northern Wild Sheep and Goat Council (June 2010) – Hood River, Oregon.
- Murray, J., and S. P. Rupp. 2010. Evaluating dietary shifts of bighorn sheep (*Ovis canadensis*) before and after use of the Sheep Lakes mineral lick, Rocky Mountain National Park, Colorado. Oral Presentation, 17th Biennial Symposium of the Northern Wild Sheep and Goat Council (June 2010) – Hood River, Oregon.
- Jarding, A., S. P. Rupp, L. E. Schmitz, and J. A. Jenks. 2009. Factors that influence elk sightability in the Black Hills, South Dakota. Poster Presentation, 16th Annual Conference of TWS (September 2009) – Monterey, California.
- Rupp, S. P. 2008. Dinosaur “Daze”: Observations from the Middle. Oral Presentation, 15th Annual Conference of TWS (November 2008) – Miami, Florida.
- Rupp, S. P. 2008. Modeling elk response to post-fire successional dynamics in northern New Mexico. Oral Presentation, Symposium of Biological Research in the Jemez Mountains, New Mexico. (Spring 2008) – Santa Fe, New Mexico.
- Rupp, S. P., D.B. Wester, and J.R. Biggs. 2006. Ecological impacts of the Cerro Grande Fire: predicting elk movement and distribution patterns in response to vegetative succession through simulation modeling. Poster Presentation, 13th Annual Conference of TWS (September 2006) – Anchorage, Alaska.
- Rupp, S. P., M. C. Wallace, R. B. Mitchell, S. M. Fettig, and C. D. Allen. 2000. Effects of elk trampling and grazing on the vegetative community of Bandelier National Monument, New Mexico. Poster Presentation, 7th Annual Conference of The Wildlife Society (Sept. 12-16, 2000)– Nashville, Tennessee.
- Rupp, S. P., M. C. Wallace, and R. B. Mitchell, S. M. Fettig, and C. D. Allen. 1999. The effect of trampling and grazing by Rocky Mountain elk (*Cervus elaphus nelsoni*) on the vegetative community of Bandelier National Monument, New Mexico. Oral Presentation, Western Deer and Elk Conference, March 1999. Salt Lake City, Utah.

Regional/State Oral/Poster Presentations (Undergrads in BOLD)

- Rupp, S. P. 2012. Students to Empowered Professionals Mentoring Program: A Case Study. South Dakota Chapter of TWS Annual Meeting (March 2012). – Oacoma, SD
- Solem, A., S. P. Rupp, T. Grovenburg, and D. B. Wester. 2012. Developing sustainable harvest strategies for cellulosic based ethanol: harvest effects on game-bird production. South Dakota Chapter of TWS Annual Meeting (March 2012). – Oacoma, SD.
- Carroll, B., and S. P. Rupp. 2012. An analysis of small mammal populations across experimental biofuels plots in the northern Great Plains. South Dakota Chapter of TWS Annual Meeting (March 2012). – Oacoma, SD
- Hegge, K.**, S. P. Rupp, and P. Johnson. 2012. Prevalence and Behavior of *Blastobasis repartella* in switchgrass. South Dakota Chapter of TWS Annual Meeting (March 2012). – Oacoma, SD
- Rupp, S. P., J. Bender, A. J. Maves, A. Solem, H. Waterman, and D. B. Wester. 2011. Seasonal harvest of perennial grasses for biofuel production: social, economic, and environmental considerations. Oral Presentation, South Dakota Chapter of TWS Annual Meeting (March 2011). – Oacoma, SD.
- Bender, J., S. P. Rupp, K.C. Jensen, and A. Boe. 2010. Developing sustainable harvest strategies for cellulose-based biofuels: The effect of harvest intensity on wildlife and biomass production. Oral Presentation, South Dakota Chapter of TWS Annual Meeting (March 2011). – Oacoma, SD.
- Bender, J., S. P. Rupp, K.C. Jensen, and A. Boe. 2010. Developing sustainable harvest strategies for cellulose-based biofuels: The effect of harvest intensity on wildlife and biomass production. Oral Presentation, Central Mountains and Plains Section of TWS Annual Meeting (August 2010). – Oacoma, SD.
- Phillips, E. C., A. R. Jarding, S. P. Rupp, J. A. Jenks, R. W. Klaver and L. E. Schmitz. 2010. Development of an elk sightability model for the Black Hills, South Dakota. Oral Presentation, 2010 annual meetings of the South Dakota Chapter of TWS (March, 2010). – Chamberlain, SD.
- Rupp, S. P. 2009. Wildlife habitat on private lands. Oral Presentation, South Dakota Chapter of The Wildlife Society (February 23, 2009) – Chamberlain, SD.
- Rupp, S. P. 2009. Dinosaur daze: observations from the middle. Oral Presentation, South Dakota Chapter of The Wildlife Society (February 23, 2009) – Chamberlain, SD.
- Rupp, S. P. 2008. Developing sustainable harvest strategies for cellulose-based biofuels. Oral Presentation, South Dakota Chapter of TWS (March 2008) – Chamberlain, SD.
- Rupp, S. P., J. R. Biggs, and D. B. Wester. 2004. Development of a spatially explicit, agent-based model for evaluating elk (*Cervus elaphus nelsoni*) movement and distribution patterns in the Eastern Jemez Mountains, New Mexico. Oral Presentation, 8th Symposium of Biological Research in the Jemez Mountains, New Mexico. (March 30, 2004) – Santa Fe, New Mexico.

- Rupp, S. P., D. B. Wester, and J. R. Biggs. 2003. Quantifying fire effects in the Jemez Mountains: A meta-analytic approach. Oral Presentation, 7th Symposium of Biological Research in the Jemez Mountains, New Mexico. (February 27, 2003) – Santa Fe, NM.
- Rupp S. P., D.B. Wester, J.R. Biggs, and L. Hansen, Proceedings of the 6th Symposium of biological research in the Jemez Mountains, Santa Fe, NM (2002) Development of a spatially-explicit, individual-based model for evaluating elk movements and distribution patterns in the eastern Jemez Mountains, New Mexico
- Rupp, S. P., M. C. Wallace, R. B. Mitchell, S. M. Fettig, and C. D. Allen. 2000. Effects of elk trampling and grazing on the vegetative community of Bandelier National Monument, New Mexico. Poster Presentation, 5th Symposium of Biological Research in the Jemez Mountains, New Mexico. (November 3, 2000) – Santa Fe, New Mexico.
- Rupp, S. P., M. C. Wallace, R. B. Mitchell, S. M. Fettig, and C. D. Allen. 2000. Effects of elk trampling and grazing on the vegetative community of Bandelier National Monument, New Mexico. Oral Presentation, 35th Annual Meeting (March 2-4, 2000): Texas Chapter - The Wildlife Society. San Angelo, Texas.
- Rupp, S. P., M. C. Wallace, R. B. Mitchell, S. M. Fettig, and C. D. Allen. 1999. The effects of trampling and grazing by Rocky Mountain elk (*Cervus elaphus nelsoni*) at Bandelier National Monument: a progress report. Proceedings of the Fourth Symposium of Biological Research in the Jemez Mountains, New Mexico. Santa Fe, New Mexico.
- Wallace, M. C., R. B. Mitchell, S. M. Fettig, C. D. Allen, S. P. Rupp, J. Davidson, A. Ganguli, and E. Wolf. 1999. Elk impact modeling on Bandelier: a new synthesis. Proceedings of the Fourth Symposium of Biological Research in the Jemez Mountains, New Mexico. Santa Fe, New Mexico.
- Rupp, S. P., M. C. Wallace, and R. B. Mitchell, S. M. Fettig, and C. D. Allen. 1999. The effect of trampling and grazing by Rocky Mountain elk (*Cervus elaphus nelsoni*) on the vegetative community of Bandelier National Monument, New Mexico. Oral Presentation, Texas Chapter of the Wildlife Society Annual Meeting, March 1999. Amarillo, Texas.
- Wallace, M. C., R. B. Mitchell, L. Vermeire, **S. Rupp**, A. Ganguli, S. M. Fettig, and C. D. Allen. 1998. A conceptual model for synthesizing elk impacts studies on Bandelier National Monument. Proceedings of the Third Symposium of Biological Research in the Jemez Mountains, New Mexico. Santa Fe, New Mexico.
- Rupp, S. P., M. C. Wallace, R. B. Mitchell, S. M. Fettig, and C. D. Allen. 1998. Effects of trampling and grazing by Rocky Mountain elk (*Cervus elaphus nelsoni*) on the vegetative community at Bandelier National Monument, New Mexico. Proceedings of the Third Symposium of Biological Research in the Jemez Mountains, New Mexico. Santa Fe, New Mexico.

Local Invited Lectures/Presentations (Undergrads in BOLD)

- Hegge, K.**, V. C. Torres, P. J. Johnson, and S. Rupp. 2012. Prevalence and behavior of *Blastobasis repartella* larvae on two cultivars of switchgrass. Poster Presentation, SDSU Undergraduate Research, Scholarship and Creative Activity Day (April 23, 2012). – Brookings, SD.

- Nettleton, T., S. P. Rupp, M. Miller, and A. Solem.** 2011. The effect of intensity of harvest on wildlife and biomass production. Poster Presentation, Bioenergy Research Day 2011 (August 5, 2010). – Brookings, SD.
- Rupp, S. P. 2010. STEP: Students to Empowered Professionals Mentoring Program. Poster, Presentation, SDSU Faculty Teaching Showcase Program (November 2010). Brookings, SD.
- Waterman, H., S. P. Rupp, J. Bender, and M. Miller.** 2010. Developing sustainable harvest strategies for cellulose-based biofuel: Evaluating the economic trade-offs associated with harvest intensity of perennial grasslands. Poster Presentation, Bioenergy Research Day 2010 (August 5, 2010). – Brookings, SD.
- Rupp, S. P. 2009. Biofuel crops in Eastern South Dakota: establishment, productivity, biotic impact, and multiple use potential. Oral Presentation, Oak Lake Field Station Fall Research Retreat (October 2009). White, SD.
- Rupp, S. P. 2009. Maintaining ecological integrity in an age of biofuels. Oral Presentation, Sun Science Seminar Series (April 2009). – Brookings, SD.
- Rupp, S. P. 2009. What is wildlife habitat? Oral Presentation, South Dakota NRCS Annual meeting (March 2009) – Swiftel Center, Brookings, SD.
- Rupp, S. P. 2009. Maintaining ecological integrity in an age of biofuels. Oral Presentation, Ecology Seminar Series (February 2009). – Brookings, SD.
- Rupp, S. P. 2008. The urban-wildland interface: A historical, scientific, and socioeconomic review of elk issues in northern New Mexico. Oral Presentation, Brookings Chapter of the National Wildlife Federation (December 2008). – Brookings, SD.
- Rupp, S. P. 2007. Modeling elk response to post-fire successional dynamics in northern New Mexico. Oral Presentation, Seminar for Ecology and Environmental Biology Seminar (BIOL790; April 2007). – Brookings, SD.
- Rupp, S. P. 2007. Modeling post-fire movement and distribution of elk in a spatially-explicit environment. Oral Presentation, Seminar for the Geographic Information Sciences Center of Excellence (April 2007). – Brookings, SD.
- Rupp, S. P. 2005. Modeling elk movement and distribution patterns following the Cerro Grande Fire. Oral presentation given at the Bradbury Science Museum, December 6, 2005. Los Alamos National Laboratory, Los Alamos, New Mexico. LA-UR-05-5067.
- Rupp, S. P. 2004. The urban-wildland interface: A historical, scientific, and socioeconomic review of elk issues in the Jemez Mountains. Oral presentation given at the Bradbury Science Museum, April 22, 2004. Los Alamos National Laboratory, Los Alamos, New Mexico. LA-UR-04-2293.
- Rupp, S. P. 1998. Invited lecture in “Policy and Administration” for Big Game Ecology class. Texas Tech University, Lubbock, Texas.

M.S. Students Completed:

- Jarding, A. June 2010. Analysis of habitat use patterns and sightability of Rocky Mountain elk (*Cervus elaphus nelsoni*) in the Black Hills of South Dakota. M.S. thesis. South Dakota State University. Currently a stay-at-home mom with a 17-month old daughter, but also co-manages a 3000-acre cattle ranch for cattle/wildlife production.
- Maves, A. July 2011. Developing sustainable harvest strategies for cellulose-based biofuels: The effect of intensity and season of harvest on migratory songbirds (B.S., University of Minnesota - Crookston). Currently employed as a Wildlife Refuge Specialist with U.S. Fish and Wildlife Service in Minnesota Valley Wetland Management District (Rapid Lakes Unit).
- Murray, J. July 2011. Evaluating dietary shifts of bighorn sheep (*Ovis canadensis*) before and after use of the Sheep Lakes mineral lick, Rocky Mountain National Park, Colorado. M.S. thesis (*Option B*). South Dakota State University. (B.S., South Dakota State University). Currently assisting parents with ranching operations.
- Phillips, E. July 2011. Analysis of habitat use patterns and sightability of Rocky Mountain elk (*Cervus elaphus nelsoni*) in the Black Hills of South Dakota. M.S. thesis. South Dakota State University. (B.S., Colorado State University). Currently searching for biologist positions with Colorado Division of Wildlife.
- Bender, J. *In Progress* (Will defend April 2012). Developing sustainable harvest strategies for cellulose-based biofuels: The effect of intensity and season of harvest on wildlife and biomass production. M.S. thesis. South Dakota State University. (B.S., South Dakota State University). Currently a Wildlife Biologist with Natural Resource Conservation Service (NRCS) in Kennebec, SD.

M.S. Students Currently Supervised:

- Carroll, B. *In progress*. Biofuel Crops in Eastern South Dakota: Establishment, Productivity, Biotic Impact, and Multiple Use Potential. M.S. thesis. South Dakota State University. (B.S., Oregon State University)
- Solem, A. *In progress*. Flushing effects of nesting ring-necked pheasant hens using auditory stimuli. M.S. thesis. South Dakota State University. (B.S., South Dakota State University)

Students Co-Advised:

- Erickson, L. *In progress (Defends April 2012)*. Grassland bird community development in native warm-season grassland plantings in eastern South Dakota: an assessment of grassland age. M.S. thesis. South Dakota State University.
- White, J. *In progress*. Modeling Assessing effects of Conservation Reserve Program grassland loss on abundance of ring-necked pheasants in South Dakota. M.S. thesis. South Dakota State University.

Committee Member:***Dissertation***

Grovenburg, T. 2010. Understanding white-tailed deer productivity: Population ecology of neonates. PhD Dissertation. South Dakota State University.

Thesis

Geiger, Melanie. 2011. The improvement and characterization of *Candida molischiana* through mutagenesis for cellulosic ethanol production. M.S. thesis (Biological Sciences). South Dakota State University.

Kyei, F. 2011. M.S. thesis (Economics), South Dakota State University.

Graduate Faculty Representative:

Dissertation

Bai, W. *In Progress*. Prevalence and effects of APOA1/C3/A4/A5 gene cluster and gene-nutrient interactions on triglyceride, HDL, LDL and coronary heart disease in the United States. PhD Dissertation (Nutritional Sciences). South Dakota State University.

Thesis

Brown, S. 2012. M.S. thesis (Academic Success Program, University College), South Dakota State University.

VanMeeteren, B. 2010. Interventions to reduce procedural pain in the pediatric population. M.S. thesis (Nursing), South Dakota State University.

Schmidt, A. 2009. M.S. thesis, South Dakota State University

Schiferl, S. 2008. M.S. thesis, South Dakota State University.

Korber, B. 2007. M.S. thesis (Educational Administration), South Dakota State University.

Undergraduate Projects Supervised (Undergraduates in BOLD):

Nettleton, T., S. P. Rupp, M. Miller, and A. Solem. 2011. The effect of intensity of harvest on wildlife and biomass production. Poster Presentation, Bioenergy Research Day 2011 (August 5, 2010). – Brookings, SD. Part of National Science Foundation “Research Experience for Undergraduates (REU) Program: Interdisciplinary Undergraduate Research Projects on Bioenergy Crops: Feedstock development, Bioprocessing and Sustainable Agriculture”

Waterman, H., S. P. Rupp, J. Bender, and M. Miller. 2010. Developing sustainable harvest strategies for cellulose-based biofuel: Evaluating the economic trade-offs associated with harvest intensity of perennial grasslands. Poster Presentation, Bioenergy Research Day 2010 (August 5, 2010). – Brookings, SD. Part of National Science Foundation “Research Experience for Undergraduates (REU) Program: Interdisciplinary Undergraduate Research Projects on Bioenergy Crops: Feedstock development, Bioprocessing and Sustainable Agriculture”

Solem, A. Summer 2010. Independent Research Project: “Flushing Effects of Nesting Ring-Necked Pheasant Hens Using Auditory Stimuli.” Funding through Pheasants Forever – Huron (\$2,000)

Swanson, L. 2008. Urban Canada Goose Management Using Non-invasive Barrier Techniques. Funding through Animal Welfare Institute (\$10,000)

Awards for Students Advised (Undergraduates in Bold):

- Oak Lake Field Station Research Grant – **Ben Van Keulen** (2012)
- Schultz-Werth Award – **Krista Hegge** (2012)
- Gamma Sigma Delta Outstanding Senior Award – **Kristin Sternhagen** (2011)
- South Dakota Chapter of TWS M.S. Student of the Year – John Bender (2011)
- SDSU Wildlife and Fisheries M.S. Student of the Year – Angela Jarding (2009)
- University Leadership nominee – **Dane Buysse** (Spring 2009)

Extension/Outreach:

- Created Students to Empowered Professionals (STEP) Mentoring Program (2008, 2010 – 2012)
- Member, South Dakota State University “NSF ADVANCE Grant” Committee (2011 - 2012), which emphasizes recruiting and retaining women faculty at SDSU. Grant to be submitted Fall 2012.
- Member, South Dakota State University “Oak Lake Field Station” Committee (2011 - 2012)
- Co-chair and organizer, first national “America’s Grasslands Conference” – South Dakota State University and hosted with National Wildlife Federation, Sioux Falls, SD. August 15-18, 2011.
- Brookings Radio interview regarding “America’s Grasslands Conference” and status of wildlife populations following wet spring in South Dakota (August 2011)
- Member, South Dakota State University “Student Engagement” Committee (2011)
- Contributed to South Dakota State University “Junior Day 2011” (Jan. 22, 2011)
- Consulted with Nebraska Game and Parks Commission on development of their elk sightability models for northwestern Nebraska (December 2010)
- Developed and delivered a one-day workshop titled, “Bighorn Sheep: The Rut and Winter Survival” for the Rocky Mountain Nature Association Field Seminar Series, November 14, 2009 and November 13, 2010. (**Invited**)
- Participant, National Fish and Wildlife Foundation “Prairie Coteau Habitat Partnership” – aimed at collaborative partnerships between agencies and private landowners to preserve grassland habitats along the Prairie Coteau (2009 – present).
- Provided technical presentation for NRCS annual meeting (March 25, 2009) on “What is Wildlife Habitat?” – Swiftel Center, Brookings, SD
- South Dakota State University’s Department of Wildlife and Fisheries Sciences contact person for the Future Farmers of America (FFA) and Little I quiz process.
- Served as a volunteer judge for the Eastern Regional Science and Engineering Fair, Frost Arena, March 27, 2009.
- “Landscaping for Wildlife” short course for Women in the Outdoors Program, National Wild Turkey Federation, Sept. 2008
- Conducted 5 interviews following a press release regarding biofuels project, including one live radio spot for “Farm Talk” in North Dakota.
- Assisted Mr. Craig Conley of Quivira Coalition in Santa Fe, NM, with development of a baseline project to evaluate elk/cattle interactions and grazing impacts on the Valles Caldera National Preserve in north central, New Mexico (2007).

Teaching and Related Experience (In addition to SDSU activities):

- Taught “Biology for Health-Related Sciences” (BIOL 124L) at the University of New Mexico – Los Alamos Branch, Summer 2006.

- Co-taught “Range-Wildlife Habitat Management” class (RWFM 4309/5309), Fall 2002. Texas Tech University, Lubbock, Texas.
- Successfully completed course in “College Teaching in Agriculture” (AGED 5310), Fall 1999. Texas Tech University, Lubbock, Texas.
- Student Tutor, “Introduction to Mammalogy” (BZ 330), Fall 1993. Colorado State University, Fort Collins, Colorado.
- Volunteer – “Science Circus” annual event held at Bradbury Science Museum to teach and excite school-age children about careers in science (2001 – present)
- Volunteer – Los Alamos County Annual Public Safety Days Event (2001 - present)
- Youth Select Soccer Coach (1991, 1995-1997)

Additional Training:

- Selected as one of ten individuals in national competition to participate in the Leadership Institute, The Wildlife Society (2007)
- Analyzing GIS and Remotely Sensed Data for Animal Movement (National Conservation Training Center, 2005)
- Introduction to ArcView Spatial Analyst (ESRI online course, October 2003)

Certifications:

- Completed requirements for Class ‘C’ Commercial Driver’s license (2008)
- Certified Wildlife Biologist (September 2008) – The Wildlife Society
- Certified Associate Wildlife Biologist (August 2000) – The Wildlife Society
- South Dakota Hunt Safe (October 2008)
- CPR/First Aid (2000 - 2005) – National Safety Council

Computer Skills:

- Basic pedagogical software (E.g., Desire2Learn, WebCT, Respondus, etc.)
- WordPerfect & MS-Word (word processing)
- Quattro Pro & Excel (spreadsheets)
- Statistica & SAS (statistical software)
- Freelance & Power Point (presentation/graphics packages)
- Paradox & MS Access (database software)
- ArcView 3.x/ArcMap (Geographical Information Systems)
- Basic programming experience in Matlab, Fortran

International Skills:

- Proficient in written and spoken Spanish
- Experience traveling and teaching in Latin America (Brazil, Chile, Argentina, Paraguay, Uruguay, Honduras) and Europe (Italy)

Field Experience:

- Experience trapping, collaring, and processing Rocky Mountain elk using clover traps
- Assisted in trapping, collaring, and processing of black bear using culvert traps
- Served as ground point-of-contact and supervised ground crews during capture/recapture operations of Rocky Mountain elk using contracted helicopter crews
- Extensive vegetation sampling (e.g., use of quadrats, point frames, calipers, line transects, etc.)
- Completed New Mexico Game and Fish course on wildlife restraint and immobilization (July 1997)
- Completed wilderness survival course, College of Santa Fe (Spring 1997)

- Experience loading and shooting dart guns and net guns
- Gave intramuscular injections to prevent disease and infection in domestic goats
- Able to identify numerous plant, animal, and bird species in American southwest and Rocky Mountain region
- Assisted in setting and operating remote control drop nets for mule deer
- Proficient using standard GPS and VHF radio tracking devices
- Successful experience setting small mammal traps to capture voles and mice
- Able to read and use topographical maps and compasses
- Experience using water quality devices such as pH, dissolved oxygen, and flow meters
- Can operate 4-WD and all-terrain vehicles
- Introduced to management of prescribed fire and assisted with control burn in Texas

Lab Experience:

- Conducted numerous bacterial inoculations for scientific study of bean and onion pathogens in the Department of Plant Pathology (CSU)
- Familiar with electrophoresis apparatus and operation
- Conducted distillations in chemistry courses
- Ran DNA isolation and quantification experiments
- Learned basic chromatography and titration techniques
- Proficient in the use of autoclaves and sterilization techniques

Additional Experience:

- Ability to effectively communicate orally and in writing (Spanish and English)
- Abundant public speaking experience
- Experience interacting with people of Latin American and Native American cultures

Personal Interests/Activities:

- Soccer
- Writing (creative and technical)
- Prison ministries

REFERENCES (Professional):

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Los Alamos National Laboratory (2000 – 2005)

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