Carol L. Campbell, Ph.D. Curriculum Vitae

Department of Geography & Environmental Studies* New Mexico State University PO Box 30001, MSC MAP Las Cruces, NM, 88003-8001

Office Phone: (575) 646-6480 Department: (575) 646-3509 Fax: (575) 646-7430 E-mail: <u>geobird@nmsu.edu</u>

Education

- Ph.D. 2005, University of California, Los Angeles, Geography Emphasis: Biogeography, habitat, niche, remote sensing.
 <u>Dissertation Title:</u> "A Biogeographic Benchmark to the Grinnell/Storer crosssection of the Sierra Nevada."
- M.A.G. 2002, New Mexico State University, Applied Geography Emphasis: Riparian communities, endangered species, mapping habitat. <u>Thesis</u> <u>Title:</u> "The Avian Community of a Riparian Landscape in a Semi-Arid Region."
- B.S. 1998, Humboldt State University, Wildlife /Minor in Biology Emphasis: Ornithology

Academic Appointments

Department Head (July 2016 – June 2023) Department of Geography*, New Mexico State University. Las Cruces, New Mexico. * Department name changed to Geography and Environmental Studies in 2022.

- Associate Professor (August 2011 present): Department of Geography, New Mexico State University. Las Cruces, New Mexico
- Assistant Professor (August 2005 2011): Department of Geography, New Mexico State University. Las Cruces, New Mexico
- Adjunct Assistant Professor (March 2010 present): Department of Biology, New Mexico State University. Las Cruces, New Mexico.
- **Graduate Research Assistant** (January 2003-March 2003): Department of Geography University of California, Los Angeles, California

Graduate Teaching Assistant (August 2000 – May 2002) Department of Geography, New Mexico State University, Las Cruces, New Mexico

Publications

- Campbell, Carol L., Jill A. McDonald, Chris Sroka, Arthur G. Guerrero, Elizabeth Olivares, Joseph R. Sharkey (2019) Geodatabase development for Visualizing Obesity Risk Factors in New Mexico-Mexico Border Communities. Papers in Applied Geography, DOI: 10.1080/23754931.2019.1649185
- Campbell, Carol L., Robert P. Sabie, Jr. Where the R's Are: A Module in Sustainability and Participatory Mapping. International Journal of Applied Geographic Research, 10 (2) April-June 2019
- Campbell, Carol L. 2010. Winter birds of Nichols Canyon, New Mexico.
 New Mexico Botanist, Special Issue 2. Proceedings of the Second Natural History of the Gila Symposium.
- Monique De Vries, Campbell, Carol L., Anna Klimaszewski-Patterson, Martha J. Desmond. 2010. Grassland fragmentation effects of burrowing owl (*Athene cunicularia*) productivity. *Papers of the Applied Geography Conferences, 2010.*
- Ahmed H. Mohamed, Jerry L. Holechek, Derek W. Bailey, Carol L. Campbell, and Michael N. DeMers. 2010. Mesquite encroachment impact in southern New Mexico Rangelands: Remote sensing and GIS approach. Journal of Applied Remote Sensing.
- Mohamed, Ahmed H., Jerry Holechek, Derek W. Bailey, and Carol L. Campbell. 2010. Using high-resolution satellite imagery to evaluate the relationship between honey mesquite canopy cover and forage production on Chihuahuan Desert. Conference Proceedings American Society for Photogrammetry and Remote Sensing 2010.
- □ Campbell, Carol L. 2009. Southwestern Willow Flycatcher (Empidonax trailii extimus) population trends at the Lower Gila Box, New Mexico. New Mexico Ornithological Society Bulletin Vol. 37 (2): 25-40.
- □ Campbell, Carol L. 2009. Circle of Geographers: The History of the Geography Department at New Mexico State University. Southwestern Geographer, 13:89-101
- □ Campbell, Carol L. 2009. Managing Riparian Habitats of the American Southwest: Birds in the Gila Lower Box, New Mexico. Southwestern Geographer, 13:40-62
- □ Wright, John B., and Carol L. Campbell. 2008. Moorish Cultural Landscapes of Las Alpujarras, Spain. *Focus on Geography*, 51(1): 25-30.
- □ Wright, John B., and Carol L. Campbell 2008. Landscape Change in Hispano and Chicano Villages of New Mexico. *Geographical Review*, 98 (4): 551-565.

Book Reviews

□ Campbell, Carol L. 2008. The Ribbon of Green: Change in Riparian Vegetation in the Southwestern United States. **Book review** in *Geographical Review*, 98 (1): 143-145.

Presentations

- Campbell, Carol L. Participatory mapping for carbon storage monitoring. Virtual paper presentation. Geo-Tech Center, Earth Observation Day, 19 April 2023.Videos of the event: https://storymaps.arcgis.com/stories/1bf617dd6f78452c8b62b9751ada394a
- Campbell, Carol L. Trees are the Obvious Connection: Participatory Mapping for Carbon Storage Monitoring. Paper Presentation. American Association of Geographers, Denver, Colorado, 23-27 March 2023.
- Campbell, C.L. and P. Maurya. Hack the Land Out of Them: Obtaining land cover classifications from GLOBE Observer photographs. Virtual presentation. AICOE Seminar; 2021 EPSCoR Cohort, 22 April 2022. https://science.gsfc.nasa.gov/sed/calendar/showevent.cfm?CalID=7681
- Campbell, Carol L., Experiential Learning: Apps to inspire research in online courses. American Association of Geographers, Virtual paper presentation. March 2021.
- Campbell, Carol L., and Scott Miller. An Experiential learning module demonstrates how geographers collect, organize and display data to increase environmental awareness among undergraduates. Applied Geography Conference,
- Campbell, Carol L. Citizen science to demonstrate data collection, organization and display to increase environmental awareness at the undergraduate level. American Association of Geographers, Denver, Colorado (cancelled due to Covid)
- Campbell, Carol L. Geodatabase Design for Health Intervention. Paper presentation at the Applied Geography Conference, Kent State University, Nov. 2018.
- Campbell, Carol L., Life spaces on campus: an introduction to humanenvironment-relationships. Presentation at the AAG. American Association of Geographers, New Orleans, LA, 2018
- □ Campbell, Carol, Francis, N., OCIP panel on On-line teaching practices. Teaching Academy, NMSU, 2018.
- Campbell, C.L., Sabie, R.P., Montes, S. Where is away: mapping recycle bins on campus. Presentation at the AAG, American Association of Geographers, Boston, MA. 2017. Sponsored paper session.
- Campbell, Carol L., Teaching with webmaps in the lower division classroom.
 Panel session at the AAG. Associations of American Geographers, Boston, Mass.
 2017

- Campbell, C. L., E. K. Druskat, W. G. Whitford. Population trends of American Crow (*Corvus brachyrynchos*) and White-winged Dove (*Zenaida asiatica*) during an agricultural shift in the Rio Grande valley of southern New Mexico. Presentation at Southwest Association of American Geographers, San Antonio, Texas, October 2015
- Martin, R. and C.L. Campbell. Detecting bird responses to Urbanization: Do Greater Roadrunners tolerate humans? Presentation at Southwest Association of American Geographers, San Antonio, Texas October 2015
- Campbell, C. L. Avian diversity increased compared to Grinnell-Storer's cross-section through Yosemite. Presentation at Southwest Association of American Geographers, Albuquerque, New Mexico October 2014
- Martin, R. and C.L. Campbell. The Birds and the Trees: The effects of Salt Cedar Removal on Migratory Bird Community Compositions. Presentation at Southwest Association of American Geographers, Albuquerque, New Mexico October 2014
- □ Campbell, C. The effects of riparian Landscape differences on the avian community of the Gila Lower Box, NM. Presentation at Southwest Association of American Geographers, Las Cruces, October 2012.
- Campbell, C. Avian community composition along an elevation gradient through Yosemite National Park. AAG annual meeting, Association of American Geographers, Los Angeles, April 2012
- Campbell, C. Avian community composition along an elevation gradient through Yosemite National Park. International Biogeography Society 6th Biennial Conference, International Biogeography Society (IBS), Florida International University, January 2013.
- Ron Treminio, Martha J. Desmond and Carol L. Campbell. Burrowing owl nest success across the Great Plains. New Mexico Ornithological Society. Albuquerque, New Mexico. April 2010.
- Ahmed H. Mohamed, Jerry L. Holechek, Derek W. Bailey, Carol L. Campbell, Andrés Cibils and Michael DeMers. Using high spatial resolution satellite imagery to detect vegetation change in response to precipitation and grazing intensity in Chihuahuan Desert Rangelands. 63rd Annual Meeting of the Society for Range Management, Denver CO. *Second place award in Graduate Student competition at the PhD level. February 2010.
- Ahmed H. Mohamed, Jerry L. Holechek, Derek W. Bailey, Carol L. Campbell, Andrés Cibils and Michael DeMers. Evaluation of Quickbird imagery for identifying dominant vegetation types in Chihuahuan Desert Rangelands. 63rd Annual Meeting of the Society for Range Management, Denver CO. February 2010.
- Jennifer Good, Martha Desmond, Wm. Gould and Carol Campbell Predators of the burrowing owl, surveying with cameras. The Wildlife Society Conference. Flagstaff, AZ. February 2010.

- Ron Treminio, Gary Roemer, Martha Desmond, and Carol Campbell. Stable isotope analysis of burrowing owl populations. The Wildlife Society Conference. Flagstaff, AZ. February 2010.
- □ Carol L. Campbell. Bird diversity and forest structure along an elevational gradient. Association of American Geographers, Las Vegas, Nevada March 2009.
- Carol L. Campbell. Managing riparian habitats of the American Southwest: Birds in the Lower Gila Box, New Mexico. Southwestern Association of American Geographers Annual Conference, San Marcos, Texas October 2008.
- Carol L. Campbell. Avian community composition in the Gila Lower Box in winter. Second Natural History of the Gila: A symposium. Silver City, New Mexico October 2008.
- Carol L. Campbell. Seasonal differences in the avian community composition of a riparian landscape in a semi-arid area. The Wildlife Society's 14th Annual Conference, Tucson, Arizona September 2007.
- Carol L. Campbell. Avian community composition variation in time across the Sierra Nevada. IV North American Ornithological Congress: Community Ecology Session, Veracruz, Mexico October 2006.
- □ Carol L. Campbell. Quantifying temperate coniferous forest structure from space. Association of American Geographer's Annual Conference: Landscape Ecology Session. Chicago, IL. March 2006.
- Carol L. Campbell. A comparison of avian community composition and forest structure relationships in the footsteps of Grinnell and Storer in Yosemite. The Western Section of the Wildlife Society's Annual Conference. Rohnert Park, California. February 2004.
- Carol L. Campbell. Comparisons of a riparian avian community in summer and winter. The Association of American Geographers, New Orleans, Louisiana March 2003.
- Carol L. Campbell. Poster: The effects of riparian landscape differences on avian species diversity in the Gila Lower Box Wildlife Habitat Area, New Mexico. The Wildlife Society's 8th Annual Conference Reno/Tahoe, Nevada. September 2001.

Digital Media Presentations and Products

Storymap of OM-DP NM Geog 326 2 Fall 2014 http://www.arcgis.com/apps/MapJournal/?appid=205947d8f59b4e5a8cb157c36de30bf9

Storymaps of Prehistoric Trackways National Monument Geog 326 Fall 2015 https://www.arcgis.com/apps/MapJournal/?appid=4fa5506de1844587a59ad44fb0dd1b18

https://www.arcgis.com/apps/MapJournal/?appid=ed559602cd004cb598b70152d228084f

Article Reviews

- Campbell, Carol L., 2020. Invited anonymous review. Ecological Niche Models Reveal Climate Change Effect on Biogeographical Regions: The Iberian Peninsula as a Case Study. Climate, 2021.
- □ Campbell, Carol L., 2019. Invited review of Chapters (3). Oxford University Press.
- Campbell, Carol L., 2018. Invited anonymous review. Characterization of Vegetation physiognomic types using bidirectional reflectance data. Geosciences. Oct. 3, 2018.
- Campbell, C. 2006. Invited anonymous review of "Deforestation in Central Africa: estimates at regional, national, and landscape levels by advanced processing of systematically-distributed Landsat extracts," an article submitted to <u>Remote Sensing of the Environment</u>. Review submitted November 2006 Manuscript # RSE –D-06-00794
- □ Campbell, C. 2009. Invited anonymous review of "Notes on some breeding raptors of central and northern Lea County, New Mexico," An article submitted to <u>New Mexico Ornithological Society Bulletin</u>. Review submitted January, 2009

Theses & Dissertations

- Campbell, Carol L. 2005. A Biogeographic Benchmark to the Grinnell/Storer cross-section of the Sierra Nevada. Ph.D. Dissertation, University of California, Los Angeles, 181 pages.
- Campbell, Carol L. 2002. The Avian Community of a Riparian Landscape in a Semi-Arid Region. M.A.G. Thesis, New Mexico State University, 174 pages

Research Collaboration and Grants

Awarded

- D 2022 PI New MexicoView, AmericaView, \$23,500, Funded, GY 22-23
- □ 2021 PI New MexicoView, AmericaView, \$23,500. Funded GY 21-22
- □ 2021, NASA EPSCoR Co-PI Hack the land out of them: \$ 99,47 Funded.
- 2020, PI New MexicoView, AmericaView, realignment for partial year award GR 6037, \$16,865. Funded GY20-21
- 2018, Recommended Tree Species Lists for New Mexico Landscapes. PI-Marissa Thompson, Co-PI Carol Campbell. \$14,944, Energy, Minerals and Natural Resources Department Forestry Division. June 3, 2018-Dec. 31, 2019
- 2017, Salud Para Usted y Su Familia (SPUSF) Health For You and Your Family.
 NMSU Collaboration with Health and Social Services. Jill McDonald
- □ 2016 NMSU, College of Arts & Sciences Travel Grant. \$1,000

Volunteer to conduct Bioblitz at Bandelier National Monument, May 20-21, 2016. Travel, lodging and meals. Experience with NPS and Bioblitz will facilitate adoption of the strategies and techniques to conduct a Bioblitz here in new National Monuments.

- 2016 NMSU, College of Arts & Sciences, Co-PI NMSU Celebrates the Parks \$14,008. Collaboration with NMSU History to host a speaker series and field trips to local National Park units. Jon Hunner, Dwight Pitcaithley, Pete Kopp collaborators.
- □ Co-PI with M. Desmond, PI, Fisheries and Wildlife, NMSU. (\$500,000 Total award). "The role of ecosystem integrity on burrowing owl spatial ecology and reproduction across the Great Plains: An integrated research and teaching approach." NRI-Managed Ecosystems grant.
- 2009 PI AmericaView, NASA- New Mexico Space Grant Consortium.
 Conduct remote sensing workshop for professionals/researchers in Las Cruces \$24,000 total. Nine participants in short course and employment for 2 undergraduates. (\$9,800).
- 2008-2009 National Geospatial Intelligence Agency, Grant HM157608C0006 (PIs: John Wright and Robert Czerniak): Center of excellence for geospatial science. Collaborator. \$1,000,000.
- D 2006 NMSU, College of Arts & Sciences Mini-Grant \$2,168
- □ 2004 UCLA Graduate School, Summer Research Mentorship Fellowship \$2,000.

Grants submitted, not awarded

- EXCITES: Expanding academic Careers through Inclusive Transitions in Environmental Science. Co-PI NSF proposal draft March 2023.
- Development of inventory of National Park's Resources \$25,000 Co-PI submitted March 2016 not awarded
- □ Remote Sensing of Tree Canopy for Las Cruces. \$64,046. June 2015, Not funded
- Tree inventory and monitoring with Remote Sensing. City of Las Cruces,
 \$22,328 Submitted May 2015 not funded
- NEH-Teaching Development Fellowship, U.S. National Parks: Exploring the Human-Land relationship, submitted September 2010.
- □ America-View, NASA-New Mexico Space Grant Consortium, (repeat) Remote sensing short course 10/11, **submitted** May 21, 2010.
- NEH-Wild Rivers grant proposal. Co-PI with M. Weisiger PI, History, NMSU.
 "Exploring the wildness of western rivers." \$150,000.
- NSF grant proposal Co-PI with M. Weisiger PI. History, NMSU (\$425,046) Retreat/workshop Gila, New Mexico, August 5-8 2010.

Teaching Philosophy

My primary goal is to empower students, inspire them, nurture their curiosity and give them confidence in their own abilities and potential. I prepare them for advanced critical thinking by framing questions within the scientific method, and linking them to the four traditions of Geography. This process rewards curiosity and observations by generating hypotheses to explain processes and patterns, while encouraging experiential learning to demonstrate the wealth of information available for geographic research.

Teaching Responsibility

I teach undergraduate and graduate level courses in Geography, 5 courses per year (fall 3/spring 2). In my 10 years at NMSU I have had 12 new course preparations. Summer school is optional and I taught 1 course in summer 2007, 2008, and 2009. Time with students via graduate committees and advising, directed readings and special topics courses are an additional requirement and a constant reward as graduate faculty.

Teaching Activities

My student credit hours per semester have increased nearly 10% per year. My cumulative student evaluation score is 3.6 with higher scores associated with repeat courses in recent years. I have recruited dozens of students into the program – two of whom, Eric Garton and Katrina Barney, completed a prestigious HERO program at Clark University. I have been active in recruiting graduate students. I have written recommendation letters for numerous students who have been accepted into funded graduate programs in Colorado, Utah and Idaho. I try to keep my door open, learn names and to shake every student's hand in the first and last class.

*Cross-listed courses offer both graduate and undergraduate credit in the same classroom

2005 - Present: Geography courses for undergraduates and graduates.

- □ GEOG 112G World Regional Geography (Summer 2007, 08, 09)
- □ GEOG 201G Humans in the Natural Environment (Fall & Spring 2005)
- □ GEOG 120G Culture & Environment (Fall & Spring 2006 2014, 2015-2022 On-line)
- □ GEOG 295 Environmental Geography (Spring 2006)
- GEOG 326 U.S. National Parks (Fall Semester 2007 2019)
- □ *GEOG 351/557 Biogeography (Spring Semester 2005 2016, Fa-2023)
- □ *GEOG 373/573 Introduction to Remote Sensing (Fall 2010)
- □ *GEOG 482/582 Digital Image Processing (Fall Semester 2007, 08, 09)
- □ GEOG 491 Desert Ecology (Spring Semester-2007)
- *GEOG 452/552 Landscape Ecology (Spring Semester-2006, 2013, 2015, Fall 2018, 2023, Spring 2020-2023 hybrid)
- □ GEOG 493 Special Topics (Recycling maps) Spring 2014 (overload)
- □ GEOG 401 Internship/Co-op Spring 2018 BLM volunteers (6, overload)

^{2000-2001:} Graduate Teaching Assistant NMSU – Geography labs for undergraduates: GIS, Cartography, Geomorphology, and Physical Geography.

Graduate Students Advised

Geography Students Supervised (Advisor/ Committee Chair) Complete:

- Laura Biddison, MAG 2006, (A) Descriptive model of winter duck habitat at Caballo Reservoir, New Mexico.
- Dana Robinson, MAG 2008, Comparison of remote sensing techniques for detection of Tamarisk (*Tamarisx spp.*) in White Sands National Monument.
- Brent Lloyd, MAG 2009, Use of remote sensing techniques to quantify border impacts from 2002 to 2007 at Coronado National Memorial, Arizona.
- Monique DeVries, MAG 2010. Habitat fragmentation effects on burrowing owl (*Athene cunicularia*) productivity in the Great Plains.
- Byron Calkins, MAG 2014. Spatial analysis of future climate structure in New Mexico viticulture regions.
- Ruben Rodriguez. MAG 2015. A predictive model for night blooming cereus (*Peniocereus greggii, var greggii*) using maximum entropy modeling.
- John (Jake) Dialesandro. Residency 2016. Using Spatial Data to Model Hydrological Runoff and Water Resources in the Western United States. Report for the Jornada Experimental Range, USDA.
- Elizabeth Coontz. MAG Residency, City of Las Cruces, Pilot Study-Urban heat island in Las Cruces. 12/2019
- Scott Miller. MAG, 2022. Updated hardiness zone map for New Mexico.

In Progress:

- Pablo Viramontes, MAG 10/2023
- Paulina Lustgarten, MAG, Residency, NMSU F&S 2/2024
- Enedelia Vitolas, MAG 11/2023

Graduate Committee Member Complete:

Kathy Whiteman, Ph.D. Biology, 5/2010 Isabella Mariotto, Ph.D. Biology, 5/2010 Michael Calkins, MS Fish, Wildlife & Conservation Ecology, 5/2010 Sue Wood, MA Public History, 5/2010 Ariel Muldoon 2006, MS Fisheries & Wildlife, 12/2006 Kendra Sullivan 2008, MAG, 5/2008 Jennifer Beatty 2008, MAG, 5/2008 Brian Burek, MAG 2014 Elizabeth Hobson, Ph.D. Biology Ahmed Mohammed, Ph.D. Range 2010 Charles Britt, MS. Fisheries, Wildlife and Conservation Ecology David Griffin, MS Fisheries, Wildlife and Conservation Ecology Ronny Forney, MAG 2014 Amalia Slaughter, MAG 2013 Heidi Iverson, MA Public History 4/2017 Alyssa Brillante, MA Public History 4/2017 Stephanie Mundis, MAG /MS Biology (dual) 6/2016 Rachel Burke, MAG 4/2017 Chris Coxen, MS, Fisheries, Wildlife and Conservation Ecology, 4/2017 Rene Pardee, MAG 6/2017 Luke Manders, MA Public History 5/2018 Mark Garnes, MA Public History 5/2019 Charles Prude, MS Fisheries, Wildlife and Conservation Ecology, 7/2020 Bryanna Quijada, MS, non-thesis Fisheries, Wildlife and Conservation Ecology, 6/2021 Nathan Brody-Lopez, MAG 4/2021 Hannah Clark, MS Anthropology, 4/2022 Gray Gass, MS Anthropology, 10/2022

In Progress:

Brad Hanson 2020-present, New Mexico Doctoral Program in Geography Dara Saville 2021-present, New Mexico Doctoral Program in Geography Eric Brennan, 2022-present, New Mexico Doctoral Program in Geography

Awards

2007 "Distinguished Member" Teaching Academy, NMSU
2006 "Distinguished Member" Teaching Academy, NMSU
2015-2016 Participant: OCIP - "On-line course improvement program", NMSU
2016 Travel Grant Award, NMSU: Bandelier National Monument Bio-blitz.
2018 "Sustaining Member" Teaching Academy, NMSU

Service Committees and Activities

- □ Editor: Geography Department Newsletter: Geo-Notes. Semi-annual newsletter that highlights activities and accomplishments of the Geography department, students and alumni. 2013 to 2014
- □ Member of NMSU Arts & Sciences College Speaker Series Committee. 2008 to 2015. Evaluate speaker applications and help organize college speaker series.
- □ Member of the Department of Geography Speaker Series Committee. 2008 to present. Coordinate and host speakers to the department.
 - o Fall 2009, 2 speakers hosted,

- TC McCarthy, Savannah River National Laboratories, Presentation, government employment.
- Bob Ternes, Adam O'Connnor, ITT Visual Information Solutions
 ENVI software product demo and workshop.
- Fall 2010, 1 speaker hosted
 - TC McCarthy, Savannah River National Laboratories, return meet with students
- Spring 2018, 1 speaker hosted
 - Sarah Bednarz, Texas A&M Geography
- Fall 2021, 1 Speaker hosted
 - Paulo Oemig, NMSU Space Grant, NASA EPSCoR Coordinator.
- Spring 2022, 1 Speaker hosted
 - Holli Kohl GLOBE Observer, NASA
- □ **Co-Advisor Geography Department Student Organization.** 2007 to present. Advisor and mentor to undergraduate and graduate students regarding activities and service opportunities.
- Panel Participant. Field Methods in Biogeography, March 2009. Association of American Geographers, Las Vegas, Nevada
- Session Chair. 2008 Southwestern Association of American Geographers Annual Conference, San Marcos, Texas
- □ Judge: Student Poster Competition 2008 Southwestern Association of American Geographers Annual Conference, San Marcos, Texas
- Abstract Judge: NM MESA-Inc Winter Design Contest

Outreach

- Consultant for NMSU F&S, Breeding Bird Monitoring and management.
 Explore trees for nests and nesting activity in construction areas and landscaping projects. Approximately 30 hours per year, 2014 to 2022.
- □ Consultant for Elephant Butte Irrigation District regarding riparian habitat restoration in Dona Ana County (2010-2011)
- □ Remote-Sensing short course through NM Space Grant Consortium
- □ Led birding field trip in Gila New Mexico as part of the 3rd Natural History of the Gila symposium October 17, 2012
- □ Led Birding field trip on NMSU Campus for SSWEC Back by noon. November 2010

Professional Societies/Memberships

 Steering Committee Member: 3rd Natural History of the Gila Symposium. March 2009 to 2011. Symposium to be held October 2010 at Western New Mexico University.

- □ Board Member: Mesilla Valley Audubon Society. Feb. 2009 to 2014
- □ MVAS scholarship committee member 2016 present
- □ Audubon Scholarship Committee Chair Feb. 2009 to 2014, 2016 present.
- **Memberships:** American Association for the Advancement of Science., Association of American Geographers, American Geographical Society, International Society for Biogeography, Society for Conservation Biology, American Ornithologist' Union, Cooper Ornithological Society, The Wildlife Society, National Audubon, Cornell Lab of Ornithology, Gamma Theta Upsilon.

Relevant Employment History

- Biological Science Technician, 5/01-8/01, GS-07, U.S.F.S. Lake Tahoe Basin Management Unit, Survey birds, establish plots, conduct vegetation measurements
- Wildlife Biologist/Geographer- Natural Resources, 4/00-3/01, GS-05, U.S.D.O.I. Bureau of Land Management, Las Cruces Field Office. Conduct endangered species surveys (Southwestern Willow Flycatcher), train field assistants, monitor wildlife, create maps, write reports.
- Wildlife Biologist, 4/99-8/99, GS-05, U.S.F.S. Pacific Southwest Research Station, Fresno, CA. 93710. Monitor birds and nests, describe and measure vegetation
- Biological Science Technician, 5-98-8/98 GS-05, U.S.F.S. Pacific Southwest Research Station, Fresno, CA. 93710. Monitor birds and nests, describe and measure vegetation.