# Kenneth G. Boykin

## Home

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#### Work

Center for Applied Spatial Écology New Mexico Cooperative Fish and Wildlife Unit Department of Fish, Wildlife, and Conservation Ecology New Mexico State University Box 30003, MSC 4901 Las Cruces, New Mexico Office (575) 646-6303 E-mail: kboykin@nmsu.edu

#### **EDUCATION**

- **Ph.D.** New Mexico State University, Las Cruces, New Mexico Rangeland Resources with Geography Minor, 2006; Kirk McDaniel (Chair)
- **M.S.** Texas Christian University, Fort Worth, Texas Biology, 1992; Gary Ferguson (Chair)
- **B.S.** New Mexico State University, Las Cruces, New Mexico Biology, 1990

#### **EMPLOYMENT**

- **2019 Present: Research Professor and Graduate Faculty Member,** New Mexico Cooperative Fish and Wildlife Research Unit, Department of Fish, Wildlife, and Conservation Ecology, New Mexico State University
- **2012 Present: Director** of New MexicoView. Principal investigator of AmericaView as a funded full member (http://newmexicoview.nmsu.edu; http://www.americaview.org/).
- **2004 Present: Director** for Center for Applied Spatial Ecology (CASE). Responsible for management of CASE laboratory, staff, and affiliated projects including GIS technical assistance.
- **2011 2019: Research Associate Professor and Graduate Faculty Member,** New Mexico Cooperative Fish and Wildlife Research Unit, Department of Fish, Wildlife, and Conservation Ecology, New Mexico State University.
- 2009 2011: College Associate Professor and Graduate Faculty Member, New Mexico Cooperative Fish and Wildlife Research Unit, Department of Fish, Wildlife, and Conservation Ecology, New Mexico State University.
- **2007 2009:** Adjunct Assistant Professor and Graduate Faculty Member, Department of Fish, Wildlife, and Conservation Ecology and Department of Animal and Range Sciences, New Mexico State University
- 1998 2009: Wildlife Research Specialist, Center for Applied Spatial Ecology, New Mexico Cooperative Fish and Wildlife Research Unit, Department of Fish, Wildlife, and Conservation Ecology, New Mexico State University, Las Cruces, New Mexico
- **1997 1998: Research Associate**, Center for Ecological Management of Military Lands, Colorado State University, Fort Bliss, Texas.
- **1996: Adjunct Faculty General Biology Instructor,** Troy State University White Sands Missile Range Branch. White Sands, New Mexico.
- **1994 1997: Wildlife Research Specialist,** New Mexico Cooperative Fish and Wildlife Research Unit, Fishery and Wildlife Science Department, New Mexico State University, Las Cruces, New Mexico.
- 1993: Environmental Scientist, Mariah Associates, Inc., Albuquerque, New Mexico.
- 1990-1992: Laboratory Instructor, Department of Biology, Texas Christian University, Fort Worth, Texas.
- 1988-1990 (Summers): Fire Engine Foreman, Bureau of Land Management, Albuquerque, New Mexico.
  - Engine foreman in charge of engine and crew responsible for initial attack on wildland fires.

**1988-1989: Research Assistant**, SouthWest Bio-Labs, Inc., Las Cruces, New Mexico. Assisted in biochemical study design and data collection.

#### TEACHING EXPERIENCE

## New Mexico State University, 1994-Present

#### Instructor

Seminar in Natural Resources Management – WLSC/ FWCE 402 - (2003/ Fall 2017/ Spring 2018/Fall 2018/Spring 2019/Fall 2019/Spring 2020) - 1 Credit

GIS in Natural Resources - FWCE 471/571 (Fall 2017/Fall 2018/Fall 2019) - 4 Credits

Herpetology – FWCE 467/567 (Spring 2018/Spring 2019/Spring 2020) – 4 Credits

Principles of Fish and Wildlife Management - FWCE 255 (Spring 2018/Spring 2019) - 3 Credits

Special Topics - Southwestern Plant Communities -WLSC 535 (Fall 2010, Spring 2011, Fall 2014) - 3 Credits

Special Topics – Ecosystem Services – WLSC 598 (Fall 2010, Fall 2012) - 3 Credits

Interdisciplinary Modeling: Water-Related Issues and Changing Climate – RGSC 618 (Summer 2012) (Co-Instructor) - 3 Credits

Special Topics - Energy and wildlife conservation - WLSC 535 (Spring 2012) - 3 Credits

Special Topics - Applied Conservation Genetics -WLSC 598 (Spring 2010) - 3 Credits

Special Topics- Applied Spatial Ecology -WLSC 450 (Spring 2009, Fall 2017) - 3 Credits

Graduate Problems - Applied Spatial Ecology 1 - WLSC 548 (Spring 2009) - 3 Credits

Graduate Special Research Programs - Applied Habitat Modeling -WLSC 598 (Spring 2009) - 3 Credits

Master's Thesis - WLSC 599 (Spring 2009-16; Fall 2009-16) - 1-3 Credits

Applied Spatial Ecology - Graduate Special Problems - WLSC 598 (Fall 2008) - 3 Credits

Applied Spatial Ecology - Range Science - Graduate Special Problems RGSC 550 (2004) - 3 Credits

Applied Spatial Ecology - Wildlife Science - Undergraduate Special Problems WLSC-450 (2004) - 3 Credits

#### Guest Lecturer

Fishery and Wildlife Sciences, Range Science, and Geography courses covering topics including GIS, GPS, landscape ecology, gap analysis, spatial statistics, habitat modeling, and watershed modeling (1999-2018).

#### Workshops

National Biodiversity Metrics & Mapping Workshop. Jacksonville, FL (2016).

Remote Sensing and Geographical Information Systems Demonstration - New MexicoView – Early College High School, Las Cruces, NM, (4 classes) (2015)

Remote Sensing - New MexicoView - Centennial High School, Las Cruces, NM (all science classes) (2013)

Biodiversity Metrics Workshop – Chapel Hill, NC (2012)

Automated Geospatial Watershed Assessment (AGWA) Tool Software Demonstration, Training Workshop, South Platte Spatial Database and Biodiversity Metrics Overview, Denver, CO (2011)

Biodiversity Metrics and Ecosystem Services Tucson, AZ (2011)

Overview of Habitat Suitability Modeling and Conservation Priorities. Multi-County Conservation Workshop. Alcalde, NM. (2010)

Wildlife Habitat GIS Modeling Workshop for Santa Fe County (full-day) (2009)

Modeling invasive species for NPS. Workshop for Chihuahuan Desert Network Workshop – (1.5 days; 1 day) (2008; 2009)

Southwest Regional Gap Analysis Project - Habitat Modeling Workshops (half-day) (2008)

Comprehensive Wildlife Conservation Strategy Database Workshop – (full-day) (2008)

Southwest Regional Gap Analysis Project – 5 Outreach Workshops (full-day) (2007)

Southwest Regional Gap Analysis Project – 5 Habitat Modeling Review Workshops (full-day) (2005)

# Troy (State) University, 1995

Instructor

Undergraduate General Biology (Lecture/Lab) (Fall 1995) - 4 Credits

# Texas Christian University, 1990-1992

Teaching Assistant

General Biology Laboratory instructor (3 sections/semester) – 1 Credit

#### **PUBLICATIONS**

# **Peer Refereed Publications**

Salas EAL, Valdez R, Michel S, **Boykin KG**. 2020. Response of Asiatic ibex (*Capra sibirica*) under Climate Change Scenarios. Journal of Resources and Ecology 11(1):27-37. DOI: 10.5814/j.issn.1674-764x.2020.01.003

- Leimer, A.K.K., **K.G. Boykin**, M.C. Andersen, C.M. Steele. 2019. Applicability of functional groups as indicators of resilience and redundancy in the San Pedro Watershed, Arizona. AIMS Environmental Science 6(3):127-146. doi: 10.3934/environsci.2019.3.127.
- Samson, E.A.; **Boykin, K.G.**; Kepner, W.G.; Andersen, M.C.; Fernald, A. Evaluating Biodiversity Metric Response to Forecasted Land Use Change in the Northern Rio Grande Basin. *Environments* 2018, *5* (8), 91; <a href="https://doi.org/10.3390/environments5080091">https://doi.org/10.3390/environments5080091</a>
- Lopez, S.C., A.F. Cibils, U.R. Smedly, S.J. Guldan, A.G. Fernald, C.G. Ochoa, **K.G. Boykin**, L. Cibils. 2018. Linkages between acequia farming and rangeland grazing in traditional agropastoral communities of the southwestern USA. Sustainability 2018, 10, 2021; doi:10.3390/su10062021
- Salas EAL, Valdez R, Michel S, **Boykin KG**. 2018. Habitat assessment of Marco Polo sheep (*Ovis ammon polii*) in Eastern Tajikistan: Modeling the effects of climate change. *Ecol Evol*. 2018;00:1–15. https://doi.org/10.1002/ecc3.4103
- Salas EAL, Seamster VA, Harings NM, **Boykin KG**, Alvarez G, and K.W, Dixon. 2017. Projected future bioclimatic-envelope suitability for Reptiles and Amphibian Species of Concern in South Central USA. Herpetological Conservation and Biology 12(2):522–547.
- Alvarez, G., E.A.L. Salas, N.M. Harings, and **K.G. Boykin**. 2017. Projections of future suitable bioclimatic conditions of parthenogenetic whiptails. Climate 2017, 5(2), 34; doi:10.3390/cli5020034
- Salas, E.A.L., V.A. Seamster, **K.G. Boykin**, N.M. Harings, and K.W. Dixon. 2017. Modeling the impacts of climate change on Species of Concern (birds) in South Central USA based on bioclimatic variables. AIMS Environmental 4(2): 358-385 doi: 10.3934/environsci.2017.2.358
- Turner, B., V. Tidwell, A. Fernald, J. Rivera, S. Rodriguez, S. Guldan, C. Ochoa, B. Hurd, **K. Boykin**, A. Cibils. 2016. Modeling acequia irrigation systems using system dynamics: model development, evaluation, and sensitivity analyses to investigate effects of socio-economic and biophysical feedbacks. *Sustainability* **2016**, *8*(10), 1019; doi:10.3390/su8101019
- Salas, E.A., R. Valdez, **K. Boykin**. 2016. Open-Access Geographic Data for the Argali Habitat in the Southeastern Tajik Pamirs. Data, 1, 5.
- Salas, E.A., **K. Boykin**, R. Valdez. 2016. Multispectral and Texture Feature Application in Image-Object Analysis of Summer Vegetation in Eastern Tajikistan Pamirs. Remote Sens. 2016, 8, 78; doi:10.3390/rs8010078
- Salas, E.A., R. Valdez, **K. Boykin**. 2015. Geographic Layers as Landscape Drivers for the Marco Polo Argali Rangeland Habitat in the Southeastern Pamir Mountain of Tajikistan. *ISPRS Int. J. Geo-Inf.* **2015**, *4*(4), 2094-2108; doi:10.3390/ijgi4042094
- Raheem, N., S. Archambault, E. Arellano, M. Gonzales, D. Kopp, J. Rivera, S. Guldan, **K. Boykin**, C. Oldham, A. Valdez, S. Colt, E. Lamadrid, J. Wang, J. Price, J. Goldstein, P. Arnold, S. Martin, E. Dingwell. 2015. A framework for assessing ecosystem services in acequia irrigation communities of the Upper Río Grande Watershed. *WIREs Water* 2015. doi: 10.1002/wat2.1091.
- Fernald, A., Guldan, S., **Boykin, K.**, Cibils, A., Gonzales, M., Hurd, B. H., Lopez, S., Ochoa, C. G., Ortiz, M., Rivera, J., Rodriguez, S., and Steele, C. M. 2014. Linked hydrologic and social systems that support resilience of traditional irrigation communities. Hydrology and Earth System Sciences 19(1):293-307 DOI 10.5194/hess-19-293-2015
- Harings, N.M., **K.G. Boykin**, L. Oligschlaeger. 2014. Reptile Occurrence and Habitat Associations on Holloman Air Force Base. *Herpetological Conservation & Biology* 9(1):57–66.
- Ochoa, C.G., S.J. Guldan, A. Cibils, S. Lopez, **K. Boykin**, V.C. Tidwell, A.G. Fernald <sup>2013</sup>. Hydrologic connectivity of head waters and floodplains in a semiarid watershed. *The Journal of Contemporary Water Research and Education 152:69-78*.
- Boykin, K.G., W.G. Kepner, D.F. Bradford, R.K. Guy, D.A. Kopp, A.K. Leimer, E.A. Samson, N.F. East, A.C. Neale, and K.J. Gergely. 2013. A National Approach for Mapping and Quantifying Habitat-based Biodiversity Metrics across Multiple Spatial Scales. *Ecological Indicators*, 33:139-147. ISSN 1470-160X, 10.1016/j.ecolind.2012.11.005.

Villarreal, M.L., L.M. Norman, **K.G. Boykin**, and C.S.A. Wallace. 2013. Biodiversity losses and conservation trade-offs: assessing future growth scenarios for a North American transnational trade corridor. International *Journal of Biodiversity Science, Ecosystem Services & Management*, DOI:10.1080/21513732.2013.770800.

- Fernald, A., V. Tidwell, J. Rivera, S. Rodriguez, S. Guldan, B. Hurd, C. Ochoa, C. Steele, M. Ortiz, **K. Boykin**, A. Cibils. 2012. Modeling Sustainability of Water, Environment, Livelihood, and Culture in Traditional Irrigation Communities and Their Linked Watersheds. *Sustainability* 2012, *4*, 2998-3022; doi:10.3390/su4112998
- Calkins, M.T., E.A. Beever, **K.G. Boykin**, J.K. Frey, and M.C Andersen. 2012. Not-so-splendid Isolation: Modeling Climate-mediated Range Collapse of a Montane Mammal (Ochotona princeps) Across Numerous Ecoregions. *Ecography* 35: 001–012, 2012, doi: 10.1111/j.1600-0587.2011.07227.x
- Martin, R.M., C.L. Keeler-Foster, **K.G. Boykin**, G. Zegers, and W.D. Wilson. 2011. Isolation and characterization of eight novel microsatellite loci in endangered Wyoming toad, Bufo baxteri. *Conservation Genetics Resources*. DOI: 10.1007/s12686-011-9544-y.
- Weltz, M.A., L. Jolley, D. Goodrich, **K. Boykin**, M. Nearing, J. Stone, P. Guertin, M. Hernandez, K. Speath, F. Pierson, C. Morris, and B. Kepner. 2011. Techniques for assessing the environmental outcomes of conservation practices applied to rangeland watersheds. *Journal of Soil And Water Conservation* 66(5) 154A-162A. doi:10.2489/jswc.66.5.146A.
- Boykin, K.G. K.E. Young, and R.K. Guy. 2011. Spatial Identification of Statewide Areas for Conservation Focus in New Mexico: Implications for State Conservation Efforts. *Diversity* 3:275-295. doi:10.3390/d3020275
- Boykin, K.G., B.C. Thompson and S. Propeck-Gray. 2010. Accuracy of southwest regional gap analysis project habitat models in predicting physical features for habitat associations. *Ecological Modelling* 221:2769-2775.
- Boykin, K.G., and K.C. McDaniel. 2008. Simulated potential effects of ecological factors on a hypothetical population of Chiricahua leopard frog (*Rana chiricahuensis*). *Ecological Modelling* 218:175-181.
- 10 Cibils, A.F., Miller, J.A. A.M. Encinias, **K.G. Boykin**, and B.F. Cooper. 2008. Monitoring heifer grazing distribution at the Valles Caldera National Preserve in northern New Mexico. *Rangelands* 30-19-23.
- 9 Black Rubio C.M., A.F. Cibils, R.L. Endecott, M.K. Petersen, and **K.G. Boykin**. 2008. Plant community selection by cattle grazing piñon juniper-grass steppe mosaics in relation to weather and animal reproductive state. *Range Ecology and Management* 61:394-404.
- Lowry, J. R. Ramsey, K. Thomas, D. Schrupp, T. Sajwaj, J. Kirby, E. Waller, S. Schrader, S. Falzarano, L. Langs, G. Manis, C. Wallace, K. Schulz, P. Comer, K. Pohs, W. Rieth, C. Velasquez, B. Wolk, W. Kepner, K. Boykin, L. O'Brien, D. Bradford, B. Thompson, J. Prior-Magee. 2007. Mapping moderate-scale land-cover over very large geographic areas within a collaborative framework: A case study of the Southwest Regional Gap Analysis Project (SWReGAP). *Remote Sensing and the Environment* 108:59-73.
- Andersen, M.C., B.C. Thompson, and **K.G. Boykin**. 2004. Spatial risk assessment across large landscapes with varied land use: Lessons from a conservation assessment of military lands. *Risk Analysis: An International Journal* 24(5):1231-1242.
- 6 Rivieccio, M., B.C. Thompson, W.R. Gould, and **K.G. Boykin**. 2003. Habitat features and predictive habitat modeling for the Colorado Chipmunk in southern New Mexico. *Western North American Naturalist*. 63:479-488.
- Hamazaki, T., B.C. Thompson, B. A. Locke and **K.G. Boykin**. 2003. Analysis of ecological context for identifying vegetation and animal conservation planning foci: An Example from the arid Southwestern United States. *Journal of Environmental Planning and Management*. 46(2):239-256.
- 4 Kroll, A.J., **K.G. Boykin**, M.C. Andersen, B.C. Thompson, and D. Daniel. 2003. Habitat characteristics of *Ashmunella* (Gastropoda: Pulmonata: Polygyridae) at White Sands Missile Range and Fort Bliss, New Mexico. *Southwestern Naturalist*. 48:14-22.
- Thompson, B.C., P.L. Matusik-Rowan, and **K.G. Boykin**. 2002. Prioritizing conservation potential of arid-land montane natural springs and associated riparian areas. *Journal of Arid Lands*. 50:527-547.
- Bak, J.M, **K.G. Boykin**, B.C. Thompson, and D. Daniel. 2001. Distribution of wintering ferruginous hawks (*Buteo regalis*) in relation to black-tailed prairie dog (*Cynomys ludovicianus*) colonies in southern New Mexico and northern Chihuahua. *Journal of Raptor Research*. 35: 124-129.
- Boykin, K. and N. Zucker. 1993. Winter aggregation on a small rock cluster by the tree lizard *Urosaurus ornatus*. *Southwestern Naturalist*. 38:304-306.

# **Book Chapters**

Boykin, K.G., E.A. Samson, and G. Alvarez. (In Press). Acequia Ecosystems. Chapter 8. I In S.J. Guldan, A. Rosenberg, and A.G. Fernald (Eds.), Acequias of New Mexico, Elements of Resilience in a Coupled Natural-Human System. (In Press). New Mexico State University.

Lopez, S.C., A.F. Cibils, L. Cibils, U.R. Smedly, S.J. Guldan, A.G. Fernald, C.G. Ochoa, **K.G. Boykin**, (in Press). The role of livestock in supporting acequia communities of northern New Mexico. Chapter 8. In S.J. Guldan, A. Rosenberg, and A.G. Fernald (Eds.), Acequias of New Mexico, Elements of Resilience in a Coupled Natural-Human System. (In Press). New Mexico State University.

- Thomas, K.A., K.A. Schulz, and **K. Boykin**. 2010. Distribution and conservation protection of natural land cover in the Sonoran Desert Ecoregion of Arizona, as described by the Southwest Regional GAP Analysis Project. In Halverson, W., C. Schwalbe and C. van Riper, III (Eds). Southwestern Desert Resources. University of Arizona Press, Tucson. Pp 81-92.
- Boykin, K.G., C. Drost, and J. J. Wynne. 2008. A gap analysis of terrestrial vertebrate species on the Colorado Plateau: Assessment from the Southwest Regional Gap Analysis Project. In van Riper, Charles, III and Mark K. Sogge (Eds). The Colorado Plateau III: Integrating Research and Resources Management for Effective Conservation. University of Arizona Press, Tucson. Pp 77-107.
- Burkett, D.W., R. Valdez, B.C. Thompson, and **K.G. Boykin**. 2002. Gemsbok, the management challenge of an exotic ungulate in the American Southwest. In Sustainable utilization—conservation in practice, H. Ebedes, B. Reilly, W. van Hoven and B. Penzhorn (eds.). Proceedings of the Fifth Wildlife Ranching Symposium, South African Game Rancher's Organisation, Pretoria, South Africa, pp. 166–171

#### Peer Reviewed Publications

- Gergely, K.J., **Boykin, K.G.**, McKerrow, A.J., Rubino, M.J., Tarr, N.M., and Williams, S.G., 2019, Gap Analysis Project (GAP) terrestrial vertebrate species richness maps for the conterminous U.S.: U.S. Geological Survey Scientific Investigations Report 2019–5034, 99 p., https://doi.org/10.3133/sir20195034.
- 24 **Boykin, K.G.,** T.S. Schrader, R.K. Guy, W.G. Kepner, A.E Ernst, A.N. el Sadek, and W.W.S. Yee. 2014. San Pedro River Basin Data Browser. EPA/600/C-14/047.
- Boykin, K.G., T.S. Schrader, R.K. Guy, W.G. Kepner, A.E. Ernst, A.N. el Sadek, and W.W.S. Yee. 2012. San Pedro River Basin Data Browser. EPA/600/R-12/550. 19 Pp.
- Guy, R.K., Boykin, K.G., Kepner, W.G., and McCarthy, J.M. 2011. South Platte River Basin Data Browser. EPA/600/R-12/001. 9 Pp.
- Guy, R.K., Boykin, K.G., Kepner, W.G., and McCarthy, J.M. 2011. South Platte River Basin Data Browser. EPA/600/C-12/001. <a href="http://fws-case-12.nmsu.edu/SouthPlatte/">http://fws-case-12.nmsu.edu/SouthPlatte/</a>
- Kepner, W. G., **K. G. Boykin**, D. F. Bradford, A. C. Neale, A. K. Leimer, and K. J. Gergely. 2011. Biodiversity Metrics. U.S. Environmental Protection Agency, Washington, DC, EPA/600/F-11/006.
- Samson, E.A., W.G. Kepner, **K.G. Boykin**, D.F. Bradford, B.G. Bierwagen, A.K.K. Leimer, R.K. Guy. 2011. Evaluating Biodiversity Response to Forecasted Land-use Change: A Case Study in the South Platte River, CO. USGS Scientific Investigations Report 2011–5169; Pp. 56-62.
- Aycrigg J., G. Beauvais, T. Gotthardt, **K. Boykin**, S. Williams, S. Lennartz, K.T. Vierling, S. Martinuzzi, and L.A. Vierling. 2011. Mapping Species Ranges and Distribution Models across the United States, Pp. 12-20. In Maxwell, Jill, Gergely, K., and Aycrigg, J., editors. 2011. Gap Analysis Bulletin No. 18. USGS/BRD/Gap Analysis Program, Moscow, ID
- Boykin, K.G., W. Kepner, and D. Bradford. 2009. Applications of SWReGAP Data to Conservation. Gap Analysis Bulletin 16:31-33. USGS/BRD/Gap Analysis Program, Moscow, ID
- Boykin, K.G. 2008. The ecology of fire on White Sands Missile Range, New Mexico: Implications for fire management. Pp 131-137. In: Narog, Marcia G., technical coordinator. 2008. Proceedings of the 2002 fire conference: managing fire and fuels in the remaining wildlands and open spaces of the Southwestern United States. Gen. Tech. Rep. PSW-GTR-189. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 363 p.
- Boykin, K.G., D.I. Boykin, R. Stovall, and R. Whitaker. 2008. Communication and implementation of current research in fire management at varying spatial and governmental scales. Pp. 209-215. In: Narog, Marcia G., technical coordinator. 2008. Proceedings of the 2002 fire conference: managing fire and fuels in the remaining wildlands and open spaces of the Southwestern United States. Gen. Tech. Rep. PSW-GTR-189. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 363 p.
- Boykin, K.G. 2008. Fire management over large landscapes: a hierarchical approach. Pp. 201-207. In: Narog, Marcia G., technical coordinator. 2008. Proceedings of the 2002 fire conference: managing fire and fuels in the remaining wildlands and open spaces of the Southwestern United States. Gen. Tech. Rep. PSW-GTR-189. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 363 p.

Boykin, K.G., D.F. Bradford, and W.G. Kepner. 2008. Habitat Distribution Models for 37 Vertebrate Species in the Mojave Desert Ecoregion of Nevada, Arizona, and Utah. U.S. Environmental Protection Agency, Office of Research and Development (EPA/600/R-08/117, 124 pp).

- 12 Kepner, W.G., **K.G. Boykin**, D.J. Semmens, D.C. Goodrich, C.J. Watts, and D.P. Guertin. 2008. The San Pedro River—A Case Study for Examining Past Landscape Change and Forecasting Hydrological and Biological Response to Urban Growth and Land-Use Change. Pp 39-40. In: Norman, L.M. Norman, Derrick D. Hirsch, and A. Wesley Ward. Proceedings of a USGS Workshop on facing tomorrow's challenges along the U.S.-Mexico border; monitoring, modeling, and forecasting change within the Arizona-Sonora transboundary watersheds: U.S. Geological Survey Circular 1322, 63 p.
- Lowry, J., W.G. Kepner, **K.G. Boykin**, K.A. Thomas, D.L. Schrupp, and P. Comer. 2008. Contemporary Digital Land-Cover Mapping for the American Southwest—The Southwest Regional Gap Analysis Project. Pp 41-42. In: Norman, L.M. Norman, Derrick D. Hirsch, and A. Wesley Ward. Proceedings of a USGS Workshop on facing tomorrow's challenges along the U.S.-Mexico border; monitoring, modeling, and forecasting change within the Arizona-Sonora transboundary watersheds: U.S. Geological Survey Circular 1322, 63 p.
- Boykin, K.G., and R.A. Deitner. 2008. A Habitat Modeling Database for the Southwest Regional Gap Analysis Project. U.S. Department of the Interior, U.S. Geological Survey, Gap Analysis Bulletin 15:
- 9 Prior-Magee, J.S., K.G. Boykin, D.F. Bradford, W.G. Kepner, J.H. Lowry, D.L. Schrupp, K.A. Thomas, and Bruce C. Thompson, Editors. 2007. Southwest Regional Gap Analysis Project Final Report. U.S. Geological Survey, Gap Analysis Program, Moscow, ID.
- 8 Ernst, A.E., S. Schrader, V. Lopez, J. Prior-Magee, **K.G. Boykin**, B. Thompson, D. Schrupp, L. O'Brien, W. Kepner, K. Thomas, and J. Lowry. 2007. Land Stewardship. Chapter 4 *in* J.S. Prior-Magee, ed. Southwest Regional Gap Analysis Final Report. U.S. Geological Survey, Gap Analysis Program, Moscow, ID.
- Boykin, K.G., B.C. Thompson, R.A. Deitner, D. Schrupp, D. Bradford, L. O'Brien, C. Drost, S. Propeck-Gray, W. Rieth, K. Thomas, W. Kepner, J. Lowry, C. Cross, B. Jones, T. Hamer, C. Mettenbrink, K.J. Oakes, J. Prior-Magee, K. Schulz, J. J. Wynne, C. King, J. Puttere, S. Schrader, and Z. Schwenke. 2007. Predicted Animal Habitat Distributions and Species Richness. Chapter 3 in J.S. Prior-Magee, ed. Southwest Regional Gap Analysis Final Report. U.S. Geological Survey, Gap Analysis Program, Moscow, ID.
- **Boykin, K.G.**, L. Langs, J. Lowry, D. Schrupp, D. Bradford, L. O'Brien, K. Thomas, C. Drost, A. Ernst, W. Kepner, J. Prior-Magee, D. Ramsey, W. Rieth, T. Sajwaj, K. Schulz, B. C. Thompson. 2007. Analysis based on Stewardship and Management Status. Chapter 5 *in* J.S. Prior-Magee, ed. Southwest Regional Gap Analysis Final Report. U.S. Geological Survey, Gap Analysis Program, Moscow, ID.
- Langs, L., **K. G. Boykin**, J. Lowry, A. Ernst, D. Bradford, W. Kepner, J. Prior-Magee, K. Schulz, D. Schrupp, K. Thomas. 2007. Conclusions and Management Implications. Chapter 6 *in* J.S. Prior-Magee, ed. Southwest Regional Gap Analysis Final Report. U.S. Geological Survey, Gap Analysis Program, Moscow, ID.
- 4 Lowry, J. H, Jr., R. D. Ramsey, K. A. Thomas, D. Schrupp, W. Kepner, T. Sajwaj, J. Kirby, E. Waller, S. Schrader, S. Falzarano, L. Langs, G. Manis, C. Wallace, K. Schulz, P. Comer, K. Pohs, W. Rieth, C. Velasquez, B. Wolk, K.G. Boykin, L. O'Brien, J. Prior-Magee, D. Bradford and B. Thompson, 2007. Land Cover Classification and Mapping. Chapter 2 in J.S. Prior-Magee, ed. Southwest Regional Gap Analysis Final Report. U.S. Geological Survey, Gap Analysis Program, Moscow, ID.
- Thomas, K.A., K.A. Schulz, **K. Boykin**. 2006. A gap perspective of the Sonoran Ecoregion in Arizona. Borders, Boundaries, and Time Scales. In: Proceedings of the Sixth Conference on Research and Resource Management in the Southwestern Deserts Extended Abstracts. May 2-5, 2006, Tucson, Arizona. Pp 93-94.
- Prior-Magee, J., K. Schulz, K.A. Thomas, D.L. Schrupp, D.F. Bradford, W.G. Kepner, **K. Boykin**, and R. Ramsey. 2002. Southwest Regional Gap Analysis Project (SWReGAP). U.S. Dep. Interior, U.S. Geological Survey, Gap Analysis Program Bulletin 11: 73-75.
- Thompson, B.C. and **K. Boykin**. 2000. Approach to regional animal modeling in the Southwest. U.S. Department of the Interior, U.S. Geological Survey, Gap Analysis Bulletin 9:27-28.

#### Dissertation/Thesis

- **Boykin, K.G.** 2006. Multiscale analysis of habitat, vegetation change, and streamflow as ecological factors affecting population dynamics of *Rana chiricahuensis*. Ph.D. Dissertation. New Mexico State University. Las Cruces, New Mexico. 198 pages.
- **Boykin, K.G.** 1992. The effect of food availability on growth rate variation in crowded northern plateau lizards (*Sceloporus undulatus elongatus*) and leopard geckos (*Eublepharis macularius*). MS Thesis. Texas Christian University, Fort Worth, Texas.

# **Technical Publications**

Boykin, K. G., Smallidge, S. T., Redell, C., (2019). GIS Database of New Mexico public lands as applied to the New Mexico Wild Horse Act (NMSA 77-18-5).

- Boykin, K. G., Smallidge, S. T., Reddell, C. (2019). Map 1: Land Stewardship of New Mexico.
- Boykin, K. G., Smallidge, S. T., Reddell, C. (2019). Map 2a: Examination of New Mexico Public Lands in regards to the Wild Horse Act (NMSA 77-18-5, 2007.
- Boykin, K. G., Smallidge, S. T., Reddell, C. (2019). Map 2b: Examination of New Mexico Public Lands in regards to the Wild Horse Act (NMSA 77-18-5, 2007
- Smallidge, S. T., Redell, C., Boykin, K. G. (2019). *Spatial examination of New Mexico public lands as applied to the New Mexico Wild Horse Act (NMSA 77-18-5)*. Report.
- Boykin, K.G. and W.G. Kepner. 2019. Mapping Biodiversity Metrics Representing Ecosystem Services at National Landscape Scales: Final Report 2019. Center for Applied Spatial Ecology, USGS New Mexico Cooperative Fish and Wildlife Research Unit, Department of Fish, Wildlife and Conservation Ecology, New Mexico State University, Final Report. 44 pages.
- Boykin, K. and N. Harings. 2019. Inventory and Synthesis of Emphasis Species Organ Mountains-Desert Peaks National Monument: Phase 3. Center for Applied Spatial Ecology, New Mexico Cooperative Fish and Wildlife Research Unit, New Mexico State University, Las Cruces, New Mexico. 9 pp.
- Boykin, K.G. and W.G. Kepner. 2018. Apple Valley, California Terrestrial Vertebrate Species Biodiversity Analysis. Technical Assistance Report. Center for Applied Spatial Ecology, NMSU, Las Cruces, NM. 12pp.
- Haring, N., **K Boykin**, P. DeSimio. 2018. Agricultural Best Practices and Farm Service Agency Promotion in Southern New Mexico & Texas Center for Applied Spatial Ecology, New Mexico Cooperative Fish and Wildlife Research Unit, New Mexico State University, Las Cruces, New Mexico. 155 pp.
- Haring, N., EA. Salas, **K Boykin**. 2018 Inventory and Synthesis of Emphasis Species Organ Mountains-Desert Peaks National Monument: Phase 1 & II. Center for Applied Spatial Ecology, New Mexico Cooperative Fish and Wildlife Research Unit, New Mexico State University, Las Cruces, New Mexico. 23 pp.
- Salas, E.A.L., V.A. Seamster, N.M. Harings, K.G. Boykin, E. Muldavin, R. McCollough, and K.W. Dixon. 2016. Modeling the Effects of Environmental Change on Crucial Wildlife Habitat. Research Completion Report. Center for Applied Spatial Ecology, New Mexico Cooperative Fish and Wildlife Research Unit, New Mexico State University, Las Cruces, New Mexico. 85 pp.
- 34 Boykin, K.G., N.M. Harings, V.A. Seamster, N. F. East, R. K. Guy, and M. C. Andersen. 2016. Methods for Determining Biodiversity Metrics, Focal Species, and Conservation Practices for Multi-scale Analysis in Support of the Conservation Effects Assessment Project (CEAP): Informing Management for Grazing Lands in the Southwest. Research Completion Report. Center for Applied Spatial Ecology, New Mexico State University, Las Cruces, New Mexico. 93 pp.
- Harings, N., **K. Boykin**, V. Seamster. 2015. Coordination Act Report for the Sparks Arroyo Flood Control Project, El Paso County, Texas. Technical Assistance Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, New Mexico, 113pp.
- Caldwell C.A., G. Alvarez, and **K.G. Boykin**. 2014. Toxicity Effects of Piscicide CFT Legumine™ (5% Rotenone) on *Lithobates* sp. of New Mexico Report to New Mexico Department of Game and Fish Share with Wildlife (#13-516-0000-00043). New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, New Mexico, 26pp
- Harings, N.M., **K.G. Boykin**, L. Oligschlaeger. 2013. Reptile Survey on HAFB: Reptile Occurrence and Habitat Associations on Holloman Air Force Base, South Central New Mexico. Technical Assistance Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, New Mexico, 31pp.
- Seamster, V.A., **K.G. Boykin**, M. Wunder, and S.A. Carleton. 2013. Development of a decision support system for New Mexico conservation within the Great Plains Landscape Conservation Cooperative. Center for Applied Spatial Ecology, New Mexico Cooperative Fish and Wildlife Research Unit, Department of Fish, Wildlife and Conservation Ecology, New Mexico State University, Las Cruces, New Mexico, USA.
- Guy, R.K., **K.G. Boykin**, C. Caldwell, K.E. Young, and A.E. Ernst, 2012. Natural resource geographic changes HAFB Review: Influences of invasive plants and shifting dunes on White Sands pupfish and burrowing owl on Holloman Air Force Base, South central New Mexico. Technical Assistance Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, New Mexico, 89 pp.
- Slaughter, C.T. and **K.G. Boykin**. 2012. Genetic Analysis and Habitat Assessment of the Iron Creek Woodlandsnails (*Ashmunella mendex*) including Black Range congeners *A. binneyi* and *A. cockerelli*. New Mexico Cooperative Fish and Wildlife Research Unit. Final Completion Report. 84 Pages.
- Boykin, K.G., R.K. Guy, M.T. Calkins, and M.C. Andersen. 2012. Modeling wildlife habitat throughout the Western United States: A prototype for use in Gap Analysis. New Mexico Cooperative Fish and Wildlife Research Unit. Technical Assistance Report. 31 pages.

Guy, R.K., **Boykin, K.G.,** Kepner, W., and McCarthy, J. 2011. Land Cover and Associated Datasets for the South Platte River Basin. New Mexico Cooperative Fish and Wildlife Research Unit. Technical Assistance Report. 13 pages.

- Calkins, M.T., **K.G. Boykin**, and M.J. McCann. 2010. Modeling Habitat for Six Species Of Concern In Nevada For The Nevada Division Of Wildlife: American Pika, Bendire's Thrasher, Hoary Bat, Pygmy Short-Horned Lizard, Greater Short-Horned Lizard, and Sonoran Mountain Kingsnake. New Mexico Cooperative Fish and Wildlife Research Unit. Technical Assistance Report. 53 pages.
- Kamienski, T. K.E. Young, and **K.G. Boykin**. 2009 Spatial Analysis of Texas Horned Lizard (*Phrynosoma cornutum*) Habitat on Holloman Air Force Base, New Mexico; Implications for Management. Research Completion Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, New Mexico 34 pp + appendices
- Boykin, K.G., R.K. Guy, and M.T. Calkins. 2009. Santa Fe County Wildlife Habitat GIS Modeling: Workshop and Conservation Priorities. New Mexico Cooperative Fish and Wildlife Research Unit. Technical Assistance Report. 58 pages.
- Calkins, M.T., **K.G. Boykin**, and M. C. Andersen. 2009. Invasive Potential of Feral Pigs in New Mexico: Preliminary Assessment and Future Directions. New Mexico Cooperative Fish and Wildlife Research Unit. Technical Assistance Report. 18 pages
- Young, K.E., **K.G. Boykin**, C. Caldwell, J. Seeger, M. Coolidge, T. Ellis, C. Aiello, E. Williams, and A. LeClerc. 2009. California spotted owl and northern goshawk surveys on the Stanislaus National Forest. Unpublished report, New Mexico Cooperative Fish and Wildlife Research Unit, New Mexico State University, Las Cruces, New Mexico. 46pp.
- Boykin, K.G., A. Ernst, T. S. Schrader, and A. Nour El Sadek. 2008. Land Cover and Associated Datasets for the San Pedro River Basin Final Report. New Mexico Cooperative Fish and Wildlife Research Unit. Technical Assistance Final Report.
- Boykin, K.G. 2008. Applications of SWReGAP Data to Conservation. Organization for Fish and Wildlife Information Managers. June 2008 Newsletter.
- Boykin, K.G., L. Owens, K.C. McDaniel, K. Duncan, and C. Hart. 2008. Geographical Information System Information Providing Coverage of Saltcedar Control and Restoration Treatments conducted under the New Mexico Non-native Phreatophyte Control Program. NM Technical Advisory Committee Report Task 3 Item 1. http://agesvrl.nmsu.edu/saltcedar/
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- Boykin, K.G. 2007. Southwest Regional Gap Analysis Project: Application, Outreach, and Education. Technical Assistance Report. New Mexico Cooperative Fish and Wildlife Research Unit.
- Frey, J.K. and **K. Boykin**. 2007. Status assessment of the Penasco least chipmunk (*Tamias minimus astristriatus*), Frey Biological Research, Radium Springs, NM. 75 pp.
- Young, K.E., T.S. Schrader, **K.G. Boykin**, C. Caldwell, and G.W. Roemer. 2007. Early Detection of Invasive Species in Big Bend National Park: Remote Sensing and GIS Strategies. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, New Mexico. 103 pp + appendices
- New Mexico Department of Game and Fish. 2006. Comprehensive Wildlife Conservation Strategy for New Mexico. New Mexico Department of Game and Fish. Santa Fe, New Mexico. 526 pp + appendices.
- 9 Ernst, A, **K.G. Boykin**, D. Browning, and B.C. Thompson. 2005. Landscape Change Detection in the Chisos Mountains of Big Bend National Park, Texas. Research Completion Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, N.M.
- Hamazaki, T., **K.G. Boykin**, and B.C. Thompson. 2001. Incorporating Landscape Context in Conservation Planning Models for Fort Bliss Military Reservation, New Mexico and Texas. Research Completion Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, N.M. 62 pp.

Boykin, K.G, J. Bak, A.J. Kroll, M. Rivieccio, R.A. Deitner, B.C. Thompson and M.C. Andersen. 2001. Application and Assessment of Species at Risk Conservation Approaches at Fort Bliss and White Sands Missile Range, New Mexico and Texas. Research Completion Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, N.M. 176 pp.

- 6 Boykin, K.G., A. De Lorenzo, B. McKown, R. Deitner, and B. C. Thompson. 2000. Southwest Regional Gap Analysis Project: The New Mexico Ecoregional Component. Research Completion Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, N.M. 59 pp.
- Boykin, K.G. 2000. The ecology of fire on White Sands Missile Range, New Mexico: Implications for Fire Management. Special Research Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, N.M. 102 pp.
- 4 Rivieccio, M., B. McKown, **K. Boykin**, and B. Thompson. 2000. Spatial depiction of desert bighorn sheep (*Ovis canadensis mexicana*), Oryx (*Oryx gazella*), Javelina (*Tayassu tajacu*), and fire occurrence in and adjacent to San Andres National Wildlife Refuge, NM. Special Technical Assistance Completion Report, New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, N.M. 41 pp.
- Boykin, K.G., and J. Washington. 1998. Arroyo, Intermittent and Riparian Habitat Survey on Fort Bliss Military Reservation, New Mexico and Texas. Research Completion Report, Center for Ecological Management of Military Lands, Department of Forest Sciences, Colorado State University, Fort Collins, CO.
- Boykin, K. G., P.L. Matusik, D. Houde-Nethers, and B.C. Thompson. 1997. Biotic and Physical Attributes of Surface and Near-Surface Water Sites on Fort Bliss Military Reservation: Inventory and Comparative Assessment. Research Completion Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, N.M. 88 pp.
- Boykin, K.G., P.L. Matusik, and B.C. Thompson. 1996. Comparative Biological and Physical Attributes of Natural Springs on White Sands Missile Range, N.M. Research Completion Report. New Mexico Cooperative Fish and Wildlife Research Unit. Las Cruces, N.M.

#### **FUNDED PROPOSALS AND GRANTS**

# Total \$6,881,344 over 24 years (average \$286,723/year)

- 46 Biodiversity and Ecosystem Services: Analysis and Application. Awarded \$50,000 by USGS (2019-2020),
- 45 Land Status Mapping and New Mexico Free-Ranging Horses. New Mexico Livestock Board. Co-PI \$32,000
- 44 State View Program Development and Operations for the State of New Mexico. Awarded \$47,000 from America View, Inc.. PI, 2018-2020
  - StateView Program Development and Operations for the State of New Mexico. Awarded \$23,500 from AmericaView, Inc.. PI, 2018-2019
  - StateView Program Development and Operations for the State of New Mexico. Awarded \$23,500 from AmericaView, Inc.. PI, 2019-2020
- 43 Multi-scale Biodiversity Metric Mapping for Ecosystem Services: From Regional to National Landscape Scales. Awarded \$428,000 by USGS and EPA (2014-2019),
  - Multi-scale Biodiversity Metric Mapping for Ecosystem Services: From Regional to National Landscape Scales. *Awarded \$50,000 by USGS*, (2018) 2014-2018. PI,
  - Multi-scale Biodiversity Metric Mapping for Ecosystem Services: From Regional to National Landscape Scales. *Awarded \$50,000 by USGS*, (2017) 2014-2018. PI,
  - Multi-scale Biodiversity Metric Mapping for Ecosystem Services: From Regional to National Landscape Scales. Awarded \$50,000 by EPA, (2017) 2014-2018. PI,
  - Multi-scale Biodiversity Metric Mapping for Ecosystem Services: From Regional to National Landscape Scales. *Awarded \$53,000 by EPA*, (2016) 2014-2017. PI,
  - Multi-scale Biodiversity Metric Mapping for Ecosystem Services: From Regional to National Landscape Scales. *Awarded \$50,000 by USGS (2016)*, 2014-2017. PI,
  - Multi-scale Biodiversity Metric Mapping for Ecosystem Services: From Regional to National Landscape Scales. Awarded \$50,000 by USGS, (2015) 2014-2017. PI,
  - Multi-scale Biodiversity Metric Mapping for Ecosystem Services: From Regional to National Landscape Scales. *Awarded \$125,000 by USGS and EPA*, (2014) 2014-2017. PI,
- Inventory and Synthesis of Existing Knowledge for Organ Mountains-Desert Peaks National Monument (OMDP). Awarded \$172,915 by New Mexico Association of Conservation Districts (2017-2019), PI
  - Inventory and Synthesis of Existing Knowledge for Organ Mountains-Desert Peaks National Monument (OMDP). Awarded \$48,404 by New Mexico Association of Conservation Districts (2018), PI

• Inventory and Synthesis of Existing Knowledge for Organ Mountains-Desert Peaks National Monument (OMDP). Awarded \$124,511 by New Mexico Association of Conservation Districts (2017), PI

- 41 Agricultural Best Practices and Farm Service Agency Promotion in Southern New Mexico. \$99,148. Awarded \$35,000 by Farm Service Agency. PI
- 40 StateView Program Development and Operations for the State of New Mexico. Awarded \$95,700 from AmericaView, Inc.. PI, 2011-2017.
  - StateView Program Development and Operations for the State of New Mexico. Awarded \$24,900 from AmericaView, Inc.. PI, 2016-2017
  - StateView Program Development and Operations for the State of New Mexico. Awarded \$23,500 from AmericaView, Inc.. PI, 2015-2016.
  - StateView Program Development and Operations for the State of New Mexico. *Awarded \$23,500 by AmericaView, Inc. 2014-1016.*
  - StateView Program Development and Operations for the State of New Mexico. *Awarded \$23,800 by AmericaView, Inc. 2011-1012.*
- 39 New Mexico Wildlife Action Plan Revision. Awarded \$23,052. NM Department of Game and Fish. Pl. 2015.
- Evaluate Wildlife Habitat for Sparks Arroyo Flood Control Project, El Paso County, Texas. *Awarded \$35,431 from US Army Corps of Engineer. Co-PI. 2014-2015.*
- Assessment and Monitoring of Biodiversity Metrics at Multiple Scales in the Southwest to Support the CEAP. Awarded \$100,000 by NRCS via CESU. PI
- 36 Modeling the effects of environmental change on crucial wildlife habitat. USGS South Central Climate Change Center. \$237,704 USGS 2013-2015. PI
- Effects of a piscicide rotenone on plains leopard frog (*Lithobates blairi*): Larva through metamorphosis life history stages. *Awarded \$10,852 by New Mexico Department of Game and Fish Share with Wildlife. 2012-2014. Co-PI.*
- 34 Study Texas Horned Lizard, reptile surveys. Awarded \$54,000 by Holloman Air Force Base 2011-2013 Co-PI.
- 33 Assessment and Monitoring of Biodiversity Metrics at Multiple Scales in the Southwest. Awarded \$130,000 by NRCS and ARS Co-PI
- Development of a Decision Support System for New Mexico Conservation within the Great Plains Landscape Conservation Cooperative, *Awarded \$98,440 by Great Plains LCC and NMDGF. 2012. Co-PI.*
- 31 Land Cover and Associated Spatial Datasets for the South Platte River Basin. Awarded \$18,400 by US Environmental Protection Agency. 2010-2011 PI
- Genetic Analysis and Habitat Assessment of the Iron Creek Woodlandsnails including Black Range congeners. Awarded \$11,265 by New Mexico Department of Game and Fish Share with Wildlife 2010-2011 Co PI.
- Acequia water systems linking culture and nature: Integrated analysis of community resilience to climate and land use changes. Awarded \$1,400,891 by National Science Foundation. 2010-2014. 13 Co-PIs.
- 28 Review, Natural Resource Geographic Changes HAFB: Influences of Invasive Plants and Shifting Dunes on White Sands Pupfish and Burrowing Owls on Holloman Air Force Base, South Central New Mexico. *Awarded* \$100,000 by Holloman Air Force Base, 2010-2011. Co-PI.
- 27 Modeling Reptile Species Distribution across the United States: Range wide Deductive Models. *Awarded 124,407 by USGS*, 2010-2011. PI
- Mapping Biodiversity Metrics Representing Ecosystem Services at the Landscape Scale in the American Southwest and the U.S. Awarded \$559,437 by USGS and EPA, 2010-1015. PI,
- 25 New Mexico View Outreach. Awarded \$8,800 by New Mexico View. 2009 Co-PI
- 24 Coati Distribution and Habitat Modeling, Awarded \$3,591, by New Mexico Department of Game and Fish. 2009 Co-PI
- 23 Wildlife Habitat GIS Modeling Workshop for Santa Fe County. Awarded \$5,040 by Santa Fe County. 2009. PI.
- Development of Invasive Plant Species Monitoring Protocol for Park Units in the Chihuahuan Desert Network Phase I & II Awarded \$58,320 by National Park Service. 2008-2010. PI.
- California Spotted Owl and Northern Goshawk surveys on Stanislaus National Forest in Support of Stewardship Fireshed Assessment Project. *Awarded \$190,766 by USDS Forest Service. 2008. Co-PI.*
- 20 Land Cover and Associated Datasets for the San Pedro River Basin. Awarded \$31,177 by TetraTech for US Environmental Protection Agency. 2008. PI
- 19 Comprehensive Wildlife Conservation Strategy (CWCS) Database for New Mexico. Awarded \$24,400 by New Mexico Department of Game and Fish. 2007. Co-PI.

Southwest Regional Gap Analysis Project: Application and Collaboration and Western Wide Analysis. *Awarded* \$497,898 by U.S. Geological Survey. 2007-2008. PI.

- 17 Biological Data Survey Consultant for Paseo del Norte Watershed Council. Awarded \$5,200 by New Mexico Department of Agriculture. 2007. PI.
- Application of Southwest Regional Gap Analysis Data to Multispecies Habitat Conservation Plan for Clark County. Awarded \$24,986 by U.S. Environmental Protection Agency. 2006-2007. PI.
- Early Detection of Invasive Species on Holloman Air Force Base. Awarded \$115,488 by Department of Defense. 2006-2007. Co-PI.
- 14 Southwest Regional Gap Analysis Project: Application, Education, and Outreach Component. *Awarded \$52,055* by U.S. Geological Survey. 2006-2007. PI.
- Spatial analysis of the New Mexico Department of Game and Fish Habitat Stamp Program. Awarded \$61,000 by New Mexico Department of Game and Fish. 2006-2007. PI.
- 12 Spatial analysis of Texas Horned Lizard habitat on Holloman Air Force Base *Awarded \$54,000 by Department of Defense. 2005-2008. Co-PI.*
- 11 Carnivore Phylogeography as A Test Of Landscape Connectivity Among National Parks Within The Chihuahuan Desert Network. Awarded \$17,100 by National Park Service 2005-2007. Co-PI.
- Invasive Species in Big Bend National Park: Identification and Verification Using Remotely Sensed Data. Awarded \$104,987. by U.S. Geological Survey 2004-2006. Co-PI.
- 9 Comprehensive Wildlife Conservation Strategy (CWCS) for New Mexico. Awarded \$140,000 by New Mexico Department of Game and Fish. 2004-2005. Co-PI.
- 8 Landscape change analysis of the Chisos Mountains. Awarded \$50,000 by National Park Service.2001-2005. Co-PI.
- 7 Southwest Regional Gap Analysis Project: The New Mexico Ecoregional Component. *Awarded* \$1,220,046 by U.S. Geological Survey.1999-2005. Co-PI.
- 6 San Andres National Wildlife Refuge: GIS Technical Assistance. Awarded \$4,000 by U.S. Fish and Wildlife Service. 1999. Co-PI..
- Incorporating Ecological Context in Conservation Planning Models for Fort Bliss Military Reservation, New Mexico and Texas. *Awarded \$100,000 by Fort Bliss Military Reservation. 1998. Co-PI.*
- Testing and application of species at risk conservation approaches at Fort Bliss and White Sands Missile Range, New Mexico and Texas. *Awarded \$200,000 by Army Environmental Center.1998-2000. Co-PI.*
- Biotic and physical attributes of surface and near-surface water sites on Fort Bliss Military Reservation: Inventory and Comparative Assessment. *Awarded \$84,648 by Fort Bliss Military Reservation*. 1996-1997. Co-PI.
- Biotic and physical attributes of surface and near-surface water sites on White Sands Military Reservation: Inventory and Comparative Assessment. *Existing Project Funding Increase \$65,000 by White Sands Missile Range. 1996. Co-PI.*
- The effect of food availability on crowding tolerance in distantly related squamates. *Awarded \$3,070 by Texas Christian University, Adkins Proposals.*

#### RECENT PRESENTATIONS (Last 5 years) (Career=213)

- McKerrow, A.J., Gergely, K.J., Boykin, K.G., Rubino, M.J., Tarr, N.M., and Williams, S.G., 2019, Gap Analysis Project (GAP) Terrestrial Vertebrate Species Richness Maps for the Conterminous U.S. American Fisheries Society and The Wildlife Society 2019 JOINT ANNUAL CONFERENCE. Reno, NV, 29 Sept 3 Oct 2019.
- Estrella, J.A. C. Burch, H. Landel. And **K. Boykin**. 2019. Conservation Science and the Digital Age A 21<sup>st</sup> Century Approach. XXIV Meeting of the Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management Victoria, British Columbia, Canada April 8-11, 2019
- **Boykin, K.G.** 2019. Globe Explorer: Adopt a Pixel Training. AmericaView Winter Business Meeting. Reston, VA 24-28 March 2019.
- **Boykin, K.G.** W.G. Kepner, A.J. McKerrow, and A.C. Neale. 2018. Applying biodiversity metrics within an ecosystem services framework to a habitat conservation plan: a case study in partner engagement. ACES: A Community on Ecosystem Services 2018. Washington, DC 3-6 December 2018.
- Kepner, W.G., and K.G. Boykin, 2018. A National Approach to Assess Terrestrial Vertebrate Biodiversity within an

- Ecosystem Services Framework: An Example using the Reptiles and Amphibians of the Mojave Ecoregion. . International Visitor Leadership Program. Las Vegas, NV. August 20, 2018
- Salas, E.A.L., **K.G. Boykin**, Colleen Caldwell, and K.W. Dixon. 2018. Modeling the Effects of Environmental Change on Crucial Wildlife Habitat. CSC Network Seminar Series Webinar. 24 May 2018
- Kepner, W.G., and **K.G. Boykin**, 2018. Assessing Multi-scale Biodiversity with an emphasis on reptiles and amphibians in the Mojave Ecoregion. International Visitor Leadership Program. Las Vegas, NV. Aprils 12, 2018
- **Boykin, K.G.** W.G. Kepner, A.J. McKerrow, and A.C. Neale. 2018. Assessing Multi-scale Biodiversity: Mojave Ecoregion Case Study. Desert Landscape Conservation Cooperative Eastern Mojave Indicators Workshop, Las Vegas, NV. February 26, 2018
- Kepner, W.G., K.G. Boykin, A.J. McKerrow, and A.C. Neale. 2018. Assessing Multi-scale Reptile and Amphibian Biodiversity: Mojave Ecoregion Case Study. Desert Tortoise Council, 43rd Annual Meeting and Symposium, Las Vegas, NV. February 23–25, 2018
- **Boykin, K.G.** 2018. Mobile Apps in the Classroom: Preparing the Next Generation. Texas Chapter of The Wildlife Society. Dallas, TX 9 February 2018.
- Salas, E.A., **K. Boykin**, R. Valdez. 2017. Multispectral and Texture Feature Application in Mapping Summer Vegetation for Marco Polo Argali in Eastern Tajikistan Pamirs. Pecora 20, Sioux Falls, SD. 13-16 November 2017.
- Salas, E.A.L., V.A. Seamster, **K.G. Boykin**, N.M. Harings and K.W. Dixon. 2017. Modeling the Effects of Environmental Change on Crucial Wildlife Habitat. Pecora 20, Sioux Falls, SD. 13-16 November 2017.
- **Boykin, K.G.**, Kepner, W.G., A.C. Neale, and K.J. Gergely 2017. Mapping and Quantifying Biodiversity and Ecosystem Services Related to Terrestrial Vertebrates: A National Approach. Pecora 20, Sioux Falls, SD. 13-16 November 2017.
- **Boykin, K.G**. 2017. Mobile Apps in the Classroom: Preparing the Next Generation. Pecora 20, Sioux Falls, SD. 13-16 November 2017.
- **Boykin, K.G**. 2017. Mobile Apps in the Classroom: Preparing the Next Generation. 24<sup>th</sup> Annual Conference of the Wildlife Society. Albuquerque, NM, 23-27 September 2017
- Kepner, W.G., **K.G. Boykin**, A.C. Neale, and K.J. Gergely 2017. A National Approach to Map and Quantify terrestrial vertebrate biodiversity. 24<sup>th</sup> Annual Conference of the Wildlife Society. Albuquerque, NM, 23-27 September 2017
- **Boykin, K.G.**, W.G. Kepner, A.J. McKerrow, A.C. Neale, and K.J. Gergely. 2017. A National Analysis of reptile biodiversity and ecosystem services within the protected areas of the United States. 24<sup>th</sup> Annual Conference of the Wildlife Society. Albuquerque, NM, 23-27 September 2017.
- Tellez, A. **Boykin, K.** Fernald, A. (2017). Effects of changing available water regimes on riparian vegetation in the Mesilla Valley basin aquifer New Mexico, USA. 62<sup>nd</sup> annual New Mexico Water Conference, August 15-16, 2017 Socorro, New Mexico.
- Tellez, A. Milanes-Murcia, M. **Boykin, K.** Fernald, A. (2017) The Mesilla Valley Basin Aquifer the impact of water regimes on riparian vegetation. Can cooperation, conservation strategies, and policies ensure sustainability of groundwater and protect riparian vegetation. Universities Council on Water Resources, UCOWR June 13-15, 2017. Fort Collins, Colorado
- Tellez, A., K. Boykin, and S. Fernald, 2017. Effects of changing available water regimes on riparian vegetation in the Mesilla Valley Basin Aquifer New Mexico, USA. Society of Wetland Scientists Annual Meeting. June 5-8, 2017San Juan, Puerto Rico,
- Salas, E.A.L., V.A. Seamster, N.M. Harings, K.G. Boykin, E. Muldavin, R. McCollough, and K.W. Dixon. 2017. Modeling the Effects of Environmental Change on Crucial Wildlife Habitat. South Central Climate Center Webinar. 19 April 2017
- Salas, E.A.L., V.A. Seamster, N.M. Harings, K.G. Boykin, E. Muldavin, R. McCollough, and K.W. Dixon. 2017. Modeling the Effects of Environmental Change on Crucial Wildlife Habitat. Brown Bag Seminar. Department of Fish, Wildlife, and Conservation Ecology, New Mexico State University. 12 April 2017. Las Cruces, NM
- **Boykin, K.G.**, W.G. Kepner, A.C. Neale, and K.J. Gergely 2017. Mapping and quantifying terrestrial vertebrate biodiversity at a national scale 50<sup>th</sup> Joint Annual Meeting Arizona/New Mexico Chapters of the Wildlife Society and Arizona/New Mexico Chapter of the American Fisheries Society. Farmington, NM, 9-11 February 2017
- **Boykin, K.G.**, W.G. Kepner, A.J. McKerrow, A.C. Neale, and K.J. Gergely. 2017 Analysis of reptile biodiversity and ecosystem services within the protected areas at a national scale. 50<sup>th</sup> Joint Annual Meeting Arizona/New Mexico Chapters of the Wildlife Society and Arizona/New Mexico Chapter of the American Fisheries Society. Farmington, NM, 9-11 February 2017
- Kepner, W.G., **K.G. Boykin**, A.C. Neale, and K.J. Gergely. 2016 National Biodiversity Metrics & Mapping Workshop. ACES: A Community on Ecosystem Services 2016. Jacksonville, FL. 5-9 December 2016.
- **Boykin, K.G.**, W.G. Kepner, A.J. McKerrow, A.C. Neale, and K.J. Gergely. 2016 Representation of Reptile Biodiversity and Ecosystem Services within the Protected Areas of the Conterminous United States. ACES: A Community on Ecosystem Services 2016. Jacksonville, FL. 5-9 December 2016.

Kepner, W.G., K.G. Boykin, A.C. Neale, and K.J. Gergely. 2016. A National System to Map and Quantify Terrestrial Vertebrate Biodiversity. ACES: A Community on Ecosystem Services 2016. Jacksonville, FL. 5-9 December 2016

Salas, E.A., K. Boykin, R. Valdez. 2016. Multispectral and Texture Feature Application in Mapping Summer Vegetation for Marco Polo Argali in Eastern Tajikistan Pamirs. Sixteenth Annual URC Research and Creative Activities Fair, NMSU. Las Cruces, NM 30 Sept 2016.

#### COMMITTEES, REVIEWS, AFFILIATIONS, HONORS, AND AWARDS

## Committees and other Professional Assignments

- 2019 (FY20) AES Competitive Graduate Assistantship Grant Program Evaluator
- New Mexico State University Graduate Faculty Appointment Through 12/31/2022
- AmericaView Technical Committee (2012-present),
- AmericaView Applied Research Committee (2012-present),
- AmericaView –Education Committee (2013-present)
- NMSU -Fish, Wildlife, and Conservation Ecology Department Facilities Committee (2008-Present)
- Las Cruces Public Schools District Advisory Committee (2016-2018)
- Centennial High School School Advisory Committee (2014-2018)
- Desert Landscape Conservation Cooperative Science Working Group 2016-2018
- Western Regional Partnerships Wildlife Subcommittee (2010 2017)
- The Wildlife Society Program Committee 24<sup>th</sup> Annual Conference of the Wildlife Society. Albuquerque, NM, 23-27 September 2017
- Session Moderator 24th Annual Conference of the Wildlife Society. Albuquerque, NM, 23-27 September 2017
- Desert Landscape Conservation Cooperative Critical Management Team for Grasslands and Shrublands Ecosystems Management – 2016-2018
- Desert Landscape Conservation Cooperative Critical Management Team for Aquatic-Riparian Ecosystems 2016-2018
- Desert Landscape Conservation Cooperative Critical Management Question 6 (Herpetofauna and Vulnerability)
   Team 2013-2018
- Desert Landscape Conservation Cooperative Critical Management Question 3 (Grasslands) Team 2013-2018
- Desert Landscape Conservation Cooperative Critical Management Question 5 (Fire and Riparian Areas) Team 2013-2018
- Desert Landscape Conservation Cooperative GIS Working Group 2011-2018
- The Wildlife Society New Mexico Chapter Past-President (2013), President (2012), President-Elect (2011)
- 46th Joint Annual Meeting Arizona/New Mexico Chapters of the Wildlife Society and Arizona/New Mexico Chapter of the American Fisheries Society- Annual Meeting Coordinator (2013)
- Session Co-Moderator and Co-Organizer Fire and Wildlife, Association of Fire Ecologist Conference, Santa Fe, NM, (2012)
- AGAVES- Assessment of Goods And Valuation of Ecosystem Services (2009-2016)
- Western Regional Partnerships GIS Committee (2010-2017)
- Natural and Human System Dynamics of Acequia Systems Innovation Working Group (2009-2014)
- New Mexico Department of Game and Fish Share With Wildlife Proposal Review Team (2009-10)
- Technical Advisory Team for Fish and Wildlife Habitat New Mexico Statewide Assessment and Strategy on Forest Resources (2009)
- Steering Team Information Sharing and Needs Assessment Workshop for Wildlife Corridors and Crucial Habitat in New Mexico (2009)
- Session Moderator Analysis and Monitoring 62nd Society for Range Management Annual Meeting & Trade Show, Albuquerque, NM (2009)
- Soil and Water Conservation Commission Non-Native Phreatophyte Control Program Technical Advisory Panel (2008)
- Paseo del Norte Watershed 319H Watershed Restoration Technical Subcommittee (2007)
- New Mexico Department of Game and Fish Narrow-headed Garter Snake Recovery Team Advisory Member (2007)
- Session Co-Organizer Comprehensive Wildlife Conservation Strategies (CWCS), National Gap Analysis Conference and Interagency Symposium, Ashville, NC (2005)
- New Mexico Department of Game and Fish Boreal Toad (Bufo boreas boreas) Recovery Team Advisory Member

(2006- present)

• Session Co-Moderator and Co-Organizer - Comprehensive Wildlife Conservation Strategies (CWCS), National Gap Analysis Conference and Interagency Symposium, Reno, Nevada, (2005)

- Fishery and Wildlife Sciences Department Action Planning Committee (2004)
- USFWS Regional Conservation Goals Team (2004)
- NMSU College of Agriculture and Home Economics UNO (Uniting NMSU Online) Committee (2004)
- Session Moderator SWReGAP Special Session for the 19<sup>th</sup> Annual Symposium of the International Association of Landscape Ecology; U.S. Chapter, Las Vegas, NV. (2004)
- Program Committee for 36th Joint Annual Meeting of The Wildlife Society (Arizona and New Mexico Chapters)
   and the American Fisheries Society (Arizona and New Mexico Chapter). Gallup, NM. (2003)
- Development and Maintenance of New Mexico Cooperative Fish and Wildlife Research Unit Web pages (1998-Present)
- Development and Maintenance of Southwest Regional Gap Analysis Project web site (1999-Present)
- NMSU Fishery and Wildlife Sciences Department Facilities Committee (1998-2000)

# Graduate Committees (Advisor [9], CA Co-Advisor [2], Committee [23])

- Bryanna Quijada <sup>B</sup>— M.S. Fish, Wildlife and Conservation Ecology (In Progress)
- Lalitha Muthu Subramanian B M.S. Geography (In Progress)
- Lauren Samaniego B M.S. Department of Fish, Wildlife and Conservation Ecology (In Progress)
- Melakeneh Gedefaw<sup>B</sup>, Ph.D. Range Science (In Progress)
- Guillermo Alvarez<sup>B</sup>, Ph.D. Biology UTEP (In Progress)
- Tyler Pounds<sup>B</sup> M.S. (2019) Traditional Ecological Knowledge of the Shawnee and Choctaw Tribes in the United States—Traditional Knowledge of Turkey Food Ways and Corn. M.S. Department of Anthropology, New Mexico State University. Las Cruces
- Aaron Adams <sup>B</sup>, M.S. (2019) A Comparative Usability Assessment of Augmented Reality 3-D Printed Terrain Models and 2-D Topographic Maps. M.S. Thesis Department of Geography, New Mexico State University. Las Cruces
- Daniel Carter<sup>B</sup>, M.S. (2019) *Mapping Trail Suitability and Connectivity in Dona Ana County, New Mexico*. M.S. Thesis Department of Geography, New Mexico State University. Las Cruces
- Aracely Tellez CA, M.S. (2018) Effects of changing available water regimes on riparian vegetation in the Mesilla Valley Basin Aquifer New Mexico, USA) M.S. Thesis. Water Sciences Program, New Mexico State University. Las Cruces
- Christin Slaughter B, Ph.D.
- Forrest East A, M.S. (2016) Using a Dynamic Systems Model to Assess the Effects of Tebuthiuron on Shrub Encroached Landscapes in Relation to Scaled Quail Habitat. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Jennifer Smith B, Ph.D. (2016) Habits and Habitats of the Rough-footed Mud Turtle, Kinosternon hirtipes, and Their Outlook for Survival. PH.D. Department of Plant and Environmental Sciences, New Mexico State University. Las Cruces
- Ruben Rodriguez <sup>B</sup>, M.S. (2015) A Predictive Vegetation Model for the Night-Blooming Cereus (Peniocereus greggi var. greggii): Using Maximum Entropy Program. M.S. Thesis. Department of Geography, New Mexico State University. Las Cruces
- Jennifer Smith B, M.S. (2014) Non-thesis option in Department of Fish, Wildlife, and Conservation Ecology
- Darin Kopp <sup>A</sup>, M.S. (2013) Mapping Spatial Concordance of Game and Nongame Wildlife in New Mexico and North Carolina. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Michelle McKay <sup>B</sup>, M.S. (2013) *Feral Swine in New Mexico*. M.S. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Dat Nguyen <sup>B</sup>, M.S. (2013) *Analyzing trade-offs in estimator performance under differing occupancy survey designs*. M.S. Thesis. Department of Statistics, New Mexico State University. Las Cruces
- Allison Leimer <sup>A</sup>, M.S. (2012) Applicability of functional groups as indicators of resilience and redundancy in the San Pedro Watershed, Arizona. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Elizabeth Samson <sup>A</sup>, M.S. (2012) Evaluating Biodiversity Metric Response to Forecasted Climate and Land-Use Change in the American Southwest. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces

 Todd Caltrider <sup>B</sup> M.S. (2012) - Relationships between Precipitation, Landscape Greenness, and Condition of Elk, Mule Deer, and Pronghorn in New Mexico. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces

- Matthew Zeigler B MS (2012) The effects of climate change on the future persistence of Rio Grande cutthroat trout: an assessment of recent climate trends, thermal limits, and current and future stream temperature trends.
   M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Zac Eads <sup>A</sup>, M.S. (2012) Predicting the Potential Habitat Distribution for Invasive Plant Species in the Northern Chihuahuan Desert. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Gregory Wright <sup>B</sup> M.S. (2011) Multiple Scale Habitat Selection by a Small Mammal Habitat Specialist (Zapus hudsonius luteus) in a Managed Floodplain Landscape. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Mary Jean McCann <sup>A</sup>, M.S. (2011) Burrow Characteristics and Social Elements of Juvenile Bolson Tortoises (Gopherus flavomarginatus) in New Mexico. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Renee Martin<sup>A</sup>, M.S. (2010) Characterization of the genetic diversity in endangered Wyoming toad (Anaxyrus baxteri). M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
  - o Dean's Award of Excellence College of Agricultural, Consumer and Environmental Sciences NMSU
- Rachel Guy<sup>A</sup>, M.S. (2010) Inductive modeling methods for the American marten using species-specific variables
  at varying extents. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State
  University. Las Cruces
  - Best Student Poster. 42nd Joint New Mexico and Arizona Chapter meeting. Gallup, NM February 5-7, 2009. Guy, R.K., K.G. Boykin, K.E. Young, and W. Gould. Spatial Identification of Regional Areas for Conservation Focus: Implications for State Conservation Efforts. (Poster)
- Mike Calkins <sup>CA</sup>, M.S. (2010) Development of Conservation Priority Models for montane Mammals using the American Pika. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
  - New Mexico Section Biodiversity Scholarship
  - Organization of Fish and Wildlife Information Managers Scholarship
- Kendal Young <sup>B</sup>, Ph.D. (2009) Efficacy of using Remotely Sensed Data for the Early Detection of Invasive Plants in the Chihuahuan Desert. Ph.D. Department of Range Science, New Mexico State University. Las Cruces
- Tomas Kamienski<sup>A</sup>,M.S. (2008) Spatial Analysis Of Texas Horned Lizard (Phrynosoma Cornutum) Habitat On Holloman Air Force Base, New Mexico; Implications For Management. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Justin Fitch<sup>B</sup>, M.S. (2008) Assessing Wildfire Risks at Multiple Spatial Scales. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Suzanne Propeck-Grey<sup>B</sup>, M.S. (Did Not Finish)
- A.J. Kroll<sup>B</sup>, M.S. (2000) *Habitat characteristics and conservation of the genus Ashmunella (Gastropoda: Pulmonata: Polygyridae) of White Sands Missile Range (NM and TX) and Fort Bliss (TX)*. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Marina Rivieccio<sup>B</sup>, M.S. (2000) Validation of predictive habitat modeling for the Colorado chipmunk (Tamias Quadrivittatus) in southern New Mexico. M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces
- Jason Bak<sup>B</sup>, M.S. (2000) The effects of black-tailed prairie dog (Cynomys ludovicianus) colonies on the distribution of wintering ferruginous hawks (Buteo regalis). M.S. Thesis. Department of Fish, Wildlife and Conservation Ecology, New Mexico State University. Las Cruces

## Peer Review for Professional Journals and Books

Animal Conservation Biodiversity and Conservation BioScience Ecological Modeling Environmental Management Gap Analysis Bulletin

Herpetological Conservation and Biology

International Journal of Geographical Information Science

Journal of Environmental Policy

Journal of Fish & Wildlife Management

Journal of Herpetology

Journal of Range Management/Rangeland Ecology and Management

Natural Areas Journal

Rangeland Ecology & Management

The Colorado Plateau III: Integrating Research and Resources Management for Effective Conservation

Proceedings of the Oklahoma Academy of Science

Southwestern Naturalist

Wetlands

Wildlife Society Bulletin

# **Professional Affiliations**

Association of Fire Ecologists (Past)

Conservation Biology (Past)

Declining Amphibian Population Task Force - Southwestern United States Working Group (Past)

Ecological Society of America (Past)

Herpetologists League (Past)

Partners in Amphibian and Reptiles Conservation

Society for Range Management (Past)

Society for the Study of Amphibians and Reptiles (Past)

Southwestern Association of Naturalists (Past)

The Wildlife Society

United States – International Association for Landscape Ecology (Past)

Western Society of Weed Science (Past)

#### Honors and Awards

Twenty-Year Service Award (2018) - New Mexico State University

AmericaView Outstanding Service Award (2017)

EPA's Science and Technological Achievement Award (STAA) (2016) – Honorable Mention for article A National Approach for Mapping and Quantifying Habitat-based Biodiversity Metrics across Multiple Spatial Scales Ecological Indicators/Special Issue Publication, October 2013, 33:139–147

Red Chile Outstanding Service Award (2015) – New Mexico Geographic Information Council

Fifteen-Year Service Award (2013) - New Mexico State University

NMSU Millionaire Researcher - New Mexico State University (2010-2011)

Ten-Year Service Award (2008) - New Mexico State University

Nominated for NMSU College of Agriculture and Home Economics Distinguished Staff Award (2008)

Best Presentation Award. Organization of Fish and Wildlife Information Managers Conference, Shepherdstown, WV,

September 17-20. Boykin. K.G. 2007. Application of SWReGAP data: Perspectives from State Wildlife Agencies.

Best Poster Award. Organization of Fish and Wildlife Information Managers Conference, Minneapolis, Minnesota, October 16-19. Prior-Magee, J., K. Boykin, A. Ernst, and J. Lowry. 2006. Southwest Regional Gap Analysis Project.

Sam Steel Society (2006)

Five-Year Service Award (2003) - New Mexico State University

Adkins Research Fellowship – Texas Christian University

San Juan College Foundation Scholarship

## Licenses and Certificates

Public Education Department of New Mexico - Pre-Level 1 Internship License - 7-12 Secondary (2016-2018)