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EDUCATION

- 1998 – 2005 Ph.D. *with Distinction* in Biology, University of New Mexico.
Dissertation: *The comparative and interactive effects of prairie dogs and banner-tailed kangaroo rats on plants and animals in the northern Chihuahuan Desert.*
- 1994 – 1998 B.S. *Magna Cum Laude*, Major in Biology, Minor in Earth & Planetary Sciences, University of New Mexico. Senior Honors Thesis: *Responses of small mammals and vegetation to a reintroduction of Gunnison's prairie dogs.*
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PROFESSIONAL EXPERIENCE

- 2009 (Sept.) – Present *Postdoctoral Fellow*. Institute of Ecology, Universidad Nacional Autónoma de México under Dr. Gerardo Ceballos.
- 2007 (June) – Present *Adjunct Research Assistant Professor*. Department of Biology, University of New Mexico (UNM).
- 2007 (Sept.) – 2009 *National Science Foundation (NSF) International Research Fellow*. Host: Institute of Ecology, UNAM, Dr. Gerardo Ceballos.
- 2006 – 2007 *Postdoctoral Fellow*. Institute of Ecology, UNAM under Dr. Gerardo Ceballos.
- 2005 – 2006 *Nature Conservancy Postdoctoral Fellow*. Hosts: Drs. Gerardo Ceballos, Institute of Ecology, UNAM and James H. Brown, Department of Biology, UNM.
- 2001 – 2005 *Museum Curatorial Assistant*. Division of Arthropods, Museum of Southwestern Biology (MSB), Department of Biology, UNM.
- 2004 (June – July) *Graduate Research Assistant*. Sevilleta Long-Term Ecological Research (LTER) Program, Department of Biology, UNM.
- 2003 (June – July) *Graduate Research Assistant*. Sevilleta LTER Program, Department of Biology, UNM.
- 2002 (October) *Contract Biologist*. Southwestern Biomes, Inc. Riparian restoration monitoring project, Pueblo of Santa Ana, Bernalillo County, NM.

(PROFESSIONAL EXPERIENCE CONTINUED)

- 2002 (June – July) *Graduate Research Assistant.* Sevilleta LTER Program, Department of Biology, UNM.
- 2002 (June) *Contract Biologist.* Grand Canyon Monitoring and Research Center, US Geological Survey. Ecological monitoring project of the Grand Canyon riparian ecosystem, Grand Canyon, AZ.
- 2001 (Aug. – Dec.) *Graduate Research Assistant.* Sevilleta LTER Program, Department of Biology, UNM.
- 2001 (June – July) *Graduate Research Assistant.* Sevilleta LTER Program, Department of Biology, UNM.
- 1998 – 2000 *Contract Biologist.* USDA, Jornada Experimental Range, Doña Ana County, NM. Cross-site desert grassland fire ecology study.
- 2000 (June – July) *Graduate Research Assistant.* Sevilleta LTER Program, Department of Biology, UNM.
- 1999 (October) *Contract Biologist.* Arid Lands Project. Prairie dog ecology study at the Gray Ranch, Hidalgo County, NM.
- 1999 (October) *Contract Biologist.* Arid Lands Project. Cross-site desert grassland fire ecology study at the Gray Ranch, Hidalgo County, NM.
- 2000 (June – July) *Graduate Research Assistant.* Sevilleta LTER Program, Department of Biology, UNM.
- 1998 (May – August) *Student in the Undergraduate Mentoring in Environmental Biology (UMEB) Program.* Sevilleta LTER Program, Department of Biology, UNM.
- 1997 (May – August) *Student in the Research Experiences for Undergraduates (REU) Program.* Department of Biology, UNM.

TEACHING EXPERIENCE

- 2008 *Guest lecturer.* Community Ecology (511), UNM.
- 2007 *Guest lecturer.* Conservation Biology, UNAM.
- 2005 *Guest lecturer.* Mammalogy (425), UNM.
- 2004 *Graduate Teaching Assistant.* Ecosystem Dynamics (405/505), UNM.
- 2002 – 2003 *Graduate Teaching Assistant.* Bosque Biology (407/507), UNM.
- 2000 – 2003 *Lecturer and Graduate Teaching Assistant.* Desert Field Biology (447/547), UNM.
- 2002 *Guest Lecturer.* Rio Grande Nature Center Summer School Program.
- 2002 *Guest Lecturer.* Audubon Expedition Institute.

1999 – 2000 Graduate Teaching Assistant. General Biology Labs (121L,122L), UNM.

PUBLICATIONS

- In Review Boyer, A. G., **A. D. Davidson**, J. D. Olden, T. M. Lee, G. Ceballos, and T. Brooks. Prioritizing the IUCN Red List process using species traits. *Frontiers in Ecology and the Environment*.
- 2011 Brown, J. H., W. Burnside, **A. D. Davidson**, J. P. DeLong, B. Dunn, M. J. Hamilton, N. Mercado, J. Okie, W. Woodruff, and W. Zuo. Energetic limits to economic growth. *BioScience* 61:19-26.
- 2011 Hamilton, M. J., **A. D. Davidson**, R. M. Sibly, and J. H. Brown. Universal scaling of production rates across mammalian lineages. *Proceedings of the Royal Society B* 278:560-566.
- 2010 Lightfoot, D. C., **A. D. Davidson**, D. Parker, and C. M. McGlone. Rabbit abundance in northern Chihuahuan Desert grassland and shrubland habitats relative to rainfall and plant production. *Western North American Naturalist* 70:490-499.
- 2010 **Davidson, A. D.**, E. Ponce, D. C. Lightfoot, E. L. Fredrickson, J. H. Brown, J. Cruzado, S. L. Brantley, R. Sierra, R. List, D. Toledo, and G. Ceballos. Rapid response of a grassland ecosystem to an experimental manipulation of a keystone rodent and domestic livestock. *Ecology* 91:3189-3200.
- 2010 Ceballos, G., **A. D. Davidson**, R. List, J. Pacheco, P. Manzano, G. Santos, and J. Cruzado. Rapid decline of a grassland ecosystem and its ecological and conservation implications. *PLoS ONE* 5:e8562.
- 2009 Ceballos, G., R. List, **A. D. Davidson**, E. Fredrickson, R. Sierra, L. Martínez, J. Herrick, and J. Pacheco. Grassland conservation in the borderlands: understanding coupled human-ecological systems to achieve conservation goals in Lopez-Hoffman, L., R. Varady, and K. Flessa. Conservation of Shared Environments: Learning from the United States and Mexico. University of Arizona Press.
- 2009 **Davidson, A. D.**, M. J. Hamilton, A. G. Boyer, J. H. Brown, and G. Ceballos. Multiple ecological pathways to extinction in mammals. *Proceedings of the National Academy of Sciences* 106:1702-1705.
- 2008 **Davidson, A. D.**, D. C. Lightfoot, and J. L. McIntyre. Engineering rodents create key habitat for lizards. *Journal of Arid Environments* 72:2142-2149.
- 2008 **Davidson, A. D.** and D. C. Lightfoot. Burrowing rodents increase landscape heterogeneity in a desert grassland. *Journal of Arid Environments* 72:1133-1145.

(PUBLICATIONS CONTINUED)

- 2007 **Davidson, A. D.** and D. C. Lightfoot. Interactive effects of keystone rodents on the structure of desert grassland arthropod communities. *Ecography* 30:515-525.
- 2006 **Davidson, A. D.** and D. C. Lightfoot. Keystone rodent interactions: prairie dogs and kangaroo rats structure the biotic composition of a desertified grassland. *Ecography* 29:755-765.
- 1999 **Davidson, A. D.**, R. R. Parmenter, and J. R. Gosz. Responses of small mammals and vegetation to a reintroduction of Gunnison's prairie dogs. *Journal of Mammalogy* 80:1311-1324.

GRANTS, AWARDS, AND FELLOWSHIPS (~\$300,000)

- 2009 Research Grant. United States Fish and Wildlife Service. \$25,000.
- 2008 Share with Wildlife Program. New Mexico Game and Fish Dept. \$11,000.
- 2008 Research Fellowship. Universidad Nacional Autónoma de México. \$25,000.
- 2007 Research Fellowship. NSF. International Research Fellowship Prog. \$157,705.
- 2006 Postdoctoral Fellowship. Universidad Nacional Autónoma de México. \$24,000.
- 2006 Postdoctoral Fellowship. J. M. Kaplan Fund. \$15,000.
- 2005 Postdoctoral Fellowship. The Nature Conservancy. \$25,000.
- 2005 Postdoctoral Fellowship. J. M. Kaplan Fund. \$15,000.
- 2005 Research Grants. T & E, Inc. \$5,000.
- 2004 – 2005 Share with Wildlife Program. New Mexico Game and Fish Dept. \$5,000.
- 2004 (June– July) Graduate Research Assistantship. NSF. Sevilleta LTER Program. \$2,500.
- 2003 (June– July) Graduate Research Assistantship. NSF. Sevilleta LTER Program. \$4,000.
- 2002 (June– July) Graduate Research Assistantship. NSF. Sevilleta LTER Program. \$4,000.
- 2002 Alvin R. and Caroline G. Grove Summer Scholarship. \$2,500.
- 2002 UNM Graduate Research, Project, and Travel (RPT) Grant. \$200.
- 2001 – 2003 Graduate Research Grant. T & E, Inc. \$2,500.
- 2001 (Aug. – Dec.) Graduate Research Assistantship. NSF. Sevilleta LTER Program. \$3,500.
- 2001 (June – July) Graduate Research Assistantship. NSF. Sevilleta LTER Program. \$3,200.
- 2000 (June – July) Graduate Research Assistantship. NSF. Sevilleta LTER Program. \$4,500.
- 1999 (June – July) Graduate Research Assistantship. NSF. Sevilleta LTER Program. \$4,500.

GRANTS, AWARDS, AND FELLOWSHIPS CONTINUED

1998 (May – Aug.) UMEB Award. NSF. Sevilleta LTER Program. \$3,500.

1997 (May – Aug) REU Award. NSF. Sevilleta LTER Program. \$3,200.

ORGANIZED SYMPOSIA AND WORKSHOPS

2010 **Davidson, A. D.**, A. G. Boyer, and G. Ceballos. Addressing the Extinction Crisis for a Changing Planet: Synthesis and New Directions for Predicting Risk Across Vertebrates Symposium, 24th International Congress for Conservation Biology Meeting, Edmonton, Canada.

2010 **Davidson, A. D.**, M. Friggens, D. C. Lightfoot, and S. C. Collins. Determining the Cascading Effects of a Reintroduced Keystone Rodent on a Grassland Ecosystem. Workshop held at the Sevilleta LTER, NM, USA.

2009 Skroch, M. and **A. D. Davidson**. Ecology and Conservation of the US-Mexico Borderlands Region Symposium, USGS and the Society for Conservation Biology's 10th Biennial Conference of Research on the Colorado Plateau, Flagstaff, AZ, USA.

SELECTED PRESENTATIONS

2011 **Davidson, A. D.**, A. G. Boyer, H. Kim, S. Pompa-Mansilla, M. J. Hamilton, D. P. Costa, G. Ceballos, and J. H. Brown. Determinants of global extinction risk in marine mammals. Marine Special Session, 5th International Biogeography Society meeting, Heraklion, Crete, Greece.

2010 **Davidson, A. D.**, M. J. Hamilton, A. G. Boyer, J. H. Brown, G. Ceballos. Multiple ecological pathways to extinction in terrestrial and marine mammals. Addressing the Extinction Crisis for a Changing Planet: Synthesis and New Directions for Predicting Risk Across Vertebrates Symposium, 24th International Congress for Conservation Biology Meeting, Edmonton, Alberta, Canada. (*Invited Presentation*)

2010 Hamilton, M. J., **A. D. Davidson**, R. M. Sibly, and J. H. Brown. Universal scaling of production rates across mammalian lineages. Gordon Research Conference, Metabolic Basis of Ecology and Evolution, Biddford, Maine, USA.

2010 **Davidson, A. D.**, E. Ponce, D. C. Lightfoot, E. L. Fredrickson, J. H. Brown, J. Cruzado, S. L. Brantley, R. Sierra, R. List, D. Toledo, and G. Ceballos. Rapid response of a grassland ecosystem to an experimental manipulation of a keystone rodent and domestic livestock. American Society of Mammalogists Meeting, Laramie, Wyoming, USA.

2009 **Davidson, A. D.** Interactive Effects of Small and Large Herbivores on the Structure of Grassland Ecosystems. University of North Dakota, Grand Forks, ND, USA. (*Invited Seminar*)

(SELECTED PRESENTATIONS CONTINUED)

- 2009 **Davidson, A. D.**, S. L. Brantley, J. H. Brown, J. Cruzado, E. L. Fredrickson, D. C. Lightfoot, R. List, P. Manzano-Fischer, E. Ponce, J. Pacheco, G. Santos, R. Sierra, and G. Ceballos. The Janos grassland ecosystem: 20 years of synthesis and experimental research revealing new insights for conservation and management. Ecology and Conservation of the US-Mexico Borderlands Region Symposium, USGS and the Society for Conservation Biology's 10th Biennial Conference of Research on the Colorado Plateau, Flagstaff, AZ, USA. (*Invited Presentation*)
- 2009 **Davidson, A. D.**, M. J. Hamilton, A. G. Boyer, J. H. Brown, G. Ceballos. Multiple ecological pathways to extinction in mammals. Global Patterns of Mammal Species Distribution: Implications for Macroecology and Conservation Symposium, International Mammalogical Congress, Mendoza, Argentina. (*Invited Presentation*)
- 2009 **Davidson, A. D.**, E. Ponce, S. L. Brantley, J. Cruzado, E. L. Fredrickson, R. Sierra, R. List, D. C. Lightfoot, D. Toledo, J. H. Brown, and G. Ceballos. Interactive effects of native and exotic herbivores: Prairie dogs and cattle cause rapid changes to a grassland community. Ecological Society of America Meeting, Albuquerque, NM, USA.
- 2009 Fredrickson, E. L., G. Ceballos, R. List, N. Barajas, N. Sayre, J. O. Roacho, R. Sierra, E. Ponce, **A. D. Davidson**, A. Melgoza, C. Jaquez, and G. A. Bezanilla. Linking biological conservation to healthy rural communities: a case history of the Janos – Casas Grandes Biosphere Reserve. Ecological Society of America Meeting, Albuquerque, NM, USA.
- 2009 Friggens, M., **A. D. Davidson**, D. C. Lightfoot, and S. L. Collins. A reintroduction of Gunnison's prairie dogs to the Sevilleta National Wildlife Refuge. Ecological Society of America Meeting, Albuquerque, NM, USA. (*poster*)
- 2009 Lightfoot, D. C., **A. D. Davidson**, E. Ponce, R. List, and G. Ceballos. Influences of native prairie dogs and domestic cattle on the native grasshopper assemblages of a desert grassland. Ecological Society of America Meeting, Albuquerque, NM, USA.
- 2009 **Davidson, A. D.**, M. J. Hamilton, A. G. Boyer, J. H. Brown, G. Ceballos. Multiple ecological pathways to extinction in mammals. Biogeography of Extinction Symposium, International Biogeography Society Meeting, Merida, Mexico. (*Invited Presentation*)

CURRENT PROFESSIONAL SERVICE

- Reviewer *Science, Proceedings of the National Academy of Sciences, National Science Foundation, Proceedings of the Royal Society B, Ecological Applications, Oikos, Conservation Biology, Oecologia, Journal of Mammalogy, Ecography, Restoration Ecology, Plant Ecology, Basic and Applied Ecology, Western North American Naturalist, Southwestern Naturalist, Journal of Arid Environments, Arctic, Antarctic, and Alpine Research, Landscape and Urban Planning.*
- 2010 – Present *Conservation Committee Member. American Society of Mammalogists.*

(CURRENT PROFESSIONAL SERVICE CONTINUED)

- 2008 – Present *Board Member.* Great Plains Restoration Council.
- 2005 – Present *Scientific Advisory Member.* Prairie Dog Coalition.
- 2004 – Present *Biological Consultant.* WildEarth Guardians.
- 2004 – Present *Biological Consultant.* Prairie Ecosystems Conservation Alliance.
- 2000 – Present *Scientific Advisory Committee Member.* New Mexico Prairie Dog Working Group. New Mexico Game and Fish Department.
- 1998 – Present *Biological Consultant.* Prairie Dog Pals.

REFERENCES

Dr. James H. Brown, *Distinguished Professor*
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Dr. James K. Detling, *Professor*
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Colorado State University
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